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Blue Cross-Blue Shield Membership Enrollment Available to Members of the Medical and Chirurgical Faculty November, 1952

The annual Blue Cross-Blue Shield membership opportunity will take place during the month of November. Throughout this time, applications for new members and for present subscribers wishing a change in status will be accepted for faculty members and their employees. The latter part of October you will receive a letter from Blue Cross-Blue Shield presenting information covering the details of enrolling along with explanatory material and application cards.

As most of you know, the Blue Shield Plan has been revised in several important respects. While Blue Shield continues to pay both medical and surgical benefits, it is important that you and your employees take note of the following important changes:

1. Service benefits are now available to married subscribers whose total income is \$4,000 or less. This represents an annual increase of \$400.00 over the former allowance.
2. The schedule of surgical benefits has been revised so as to provide \$200.00 for a number of the more difficult operations and allowances for some common surgeries such as appendectomies and tonsillectomies have been increased.
3. In order to conform to the standards set by the Wage Stabilization Board providing automatic approval for employers who wish to pay all or part of the coverage for their employees, medical benefits have been revised to pay \$15.00 for the first day, \$5.00 for the second and third day each and \$4.00 for the fourth through the twenty-first day each.
4. Changes in Blue Shield benefits have entailed a change in subscription charges as follows: individual \$.90; two person \$1.80; family \$3.00. The new rates and benefits under Blue Shield became effective September 1, 1952.

For additional information concerning the advantages of the Blue Shield Plan, please consult the folder which will be sent you by the Blue Cross-Blue Shield office.

The Blue Cross Plan which now has an enrollment of more than 850,000 subscribers was favorably revised as of December 1, 1951. While the majority of faculty members are probably familiar with the details of Blue Cross, a summary of the main features of the Plan is presented for your convenience.

For subscribers using semi-private rooms, Blue Cross pays the bill in full for the customary services regardless of cost. These services are:

- a. Room, meals, special diets
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- c. Operating room

- d. Anesthesia given by hospital employee
- e. Standard drugs and medications
- f. Laboratory examinations (when a necessary part of in-patient care)
- g. X-ray examinations
- h. Electrocardiograms
- i. Physiotherapy
- j. Casts and dressings
- k. All other customary hospital services

Subscribers using private rooms in member hospitals receive a credit of \$7.00 a day toward the room charge plus a credit of 75% of the charges for all customary hospital services.

As in the case of Blue Shield all basic information concerning Blue Cross will be contained in folders which will reach you direct from the Blue Cross office.

Continued support of the Blue Cross-Blue Shield Plans is still the best means of enabling citizens of Maryland to pay for their health care on a voluntary basis. The success of Blue Cross-Blue Shield is universally used as a most effective counter-proposal in discussions and debates wherever the need for some enforced health program is advocated. Blue Cross-Blue Shield, operating as they do on a non-profit basis with the cooperation of the medical profession and the hospitals, has proven to be the most inexpensive method of providing comprehensive benefits to persons who wish to maintain freedom of choice and opportunity in managing all needs pertaining to their health.

* * * * *

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Scientific Papers

TRANSACTIONS

Additional scientific papers which were presented during the April, 1952, Annual Meeting of the Medical and ¹Chirurgical Faculty and are a part of the Transactions, will be published in subsequent Journals and so noted on the articles.

Contraindications to ACTH and Cortisone¹

Panel Discussion

DR. R. CARMICHAEL TILGHMAN²: This afternoon's meeting will be a Panel Discussion on ACTH. I would like to introduce those participating and then turn the meeting over to the Moderator. The Moderator is Dr. Warde B. Allan, Associate Professor of Medicine at Johns Hopkins University, School of Medicine. Dr. A. McGehee Harvey, Professor of Medicine at Johns Hopkins University School of Medicine, and Physician-in-Chief at the Johns Hopkins Hospital. Dr. John C. Krantz, Jr., Professor of Pharmacology, University of Maryland, School of Medicine. I'd like to turn the meeting over to Dr. Allan, the Moderator.

DR. WARDE B. ALLAN³: Dr. Tilghman, Members of the Faculty and Guests, I have been asked to act as moderator in the panel discussion this afternoon. The subject that has been announced is "Contraindications to ACTH and Cortisone," and I assume that Dr. Krantz and Dr. Harvey will cover this subject thoroughly. However I am taking the liberty of suggesting

for the sake of subsequent discussion and for questions from the floor that we will include in the title "Indications for ACTH and Cortisone."

In the past sixteen years, we have seen an amazing and revealing period of therapeutic agents and procedures that far surpass anything that has been seen in any previous comparable period.

In the field of Medicine we have seen the introduction of sulfanilamide in 1936. In the field of Surgery the remarkable improvements in thoracic surgery and the daring vascular surgery are awe-inspiring and of enormous benefit. The appearance almost annually of newer and less toxic sulfonamides and various antibiotics with broader spectrum have crowded in on us to such a degree that we, the medical profession recklessly prescribe them often in inadequate doses, causing the development of resistant strain of organisms and producing sensitivity of a severe type in certain individuals.

Three years ago this May, Dr. Hench introduced his very dramatic findings of the value of the substance now known as Cortisone in the treatment of rheumatoid arthritis, and since that time the therapeutic trial of ACTH and Cortisone has been extended to every field of medicine. The volume of data accumulated and published

¹ Papers presented on Tuesday afternoon, April 29, 1952, at the Annual Meeting, Medical and Chirurgical Faculty of Maryland. (Faculty Transactions, 1952.)

² Vice-President.

³ Associate Professor of Medicine, School of Medicine, The Johns Hopkins University.

is overwhelming and almost beyond the comprehension of the average physician. These two substances have been so publicized both in the medical and lay press that one might get the idea that we have reached the millenium and we have one substance that will cure all ills.

At a conference two years ago, I heard a word of caution used that might bear repeating, namely, that "these drugs ACTH and Cortisone are only cures in self-limited diseases and should be used only with great caution." It has been admitted that these two and similar substances are of tremendous accessory value in the treatment of a great variety of disease processes. However, we must understand something about the fundamental and potent effects of ACTH and Cortisone on the human being as a whole before we can use them properly. It would be nice to have Dr. Krantz talk about the pharmacological and physiological effects of ACTH and Cortisone.

DR. KRANTZ¹: Mr. Chairman, Members of the Medical and Chirurgical Faculty and Guests. On Christmas day in 1914, E. C. Kendall, working at the Mayo Clinic, isolated thyroxin from thyroid glands. Twenty-one years later in 1935 this same biological chemist succeeded in isolating from the adrenal cortex what is now known as Kendall's Compound "E" or Cortisone. He obtained this substance in only milligram quantities.

It is very interesting to note how he happened to get any of it at all. It was through the interest of Oliver Kamm of Parke-Davis & Company, who supplied him with adrenal glands from which Kendall made first the impure adrenalin. This was then shipped back to Parke-Davis & Company, and they supplied the pure adrenalin to the medical profession. But it was the supplying of large amounts of the adrenal gland to Kendall by Oliver Kamm that made it possible for him to get milligram quantities of Cortisone.

¹ Professor of Pharmacology, School of Medicine, The University of Maryland.

With this meagre amount of substance Kendall was able to show that rats, upon injection could be made resistant to strain, to poisons, to exposure to cold, etc. Owing to the paucity of supply no clinical tests on this substance were carried out.

In 1942 word came to this country through military sources that members of the Luftwaffe were injected with eleven ketosteroids in order to give them excessive resistance to stress and strain. The making of this Compound "E" of Kendall then became an emergency measure, and in 1946, shortly after the war was over, Kendall succeeded in synthesizing Cortisone. In 1948, Sarrett, of Merck & Company, went through the thirty-seven separate and distinct steps of synthesis and provided this compound in gram rather than in milligram quantities, in which heretofore it had only been available.

The development of ACTH follows a similar pattern. Dr. Lye at the University of California, working with very small quantities of pituitary glands, succeeded in getting ACTH in an active form from the anterior lobe of the pituitary body. Dr. Mott of the Armour Laboratory, following this laboratory procedure in 1948, got ACTH in such a form that it was made available to several clinics in the country, much of it being sent to Dr. George W. Thorn. We are indebted to the work of Dr. Thorn in first exploring its potentialities in the Peter Bent Brigham Hospital.

Today ACTH and Cortisone are available in quantity, and our consideration this afternoon will be some of their physiologic and pharmacologic responses, with special emphasis upon the theme of the afternoon, namely, the untoward effects elicited by these substances.

Figure 1 shows the development from a physiological standpoint of ACTH. The release of Cortisone is also shown. One observes first that at figure "1," neurogenic stimuli, the autonomic phase of the development and secretion of this substance is begun. This passes over to "2" in the diencephalon. This then passes down to "3," which is the adrenal medulla. The adrenal

medulla, stimulated by the splanchnic nerves, stimulates the secretion of adrenalin. Passing from "3" to "4," the anterior lobe of the pituitary body is stimulated and here ACTH is secreted from the basophilic and acidophilic cells of the

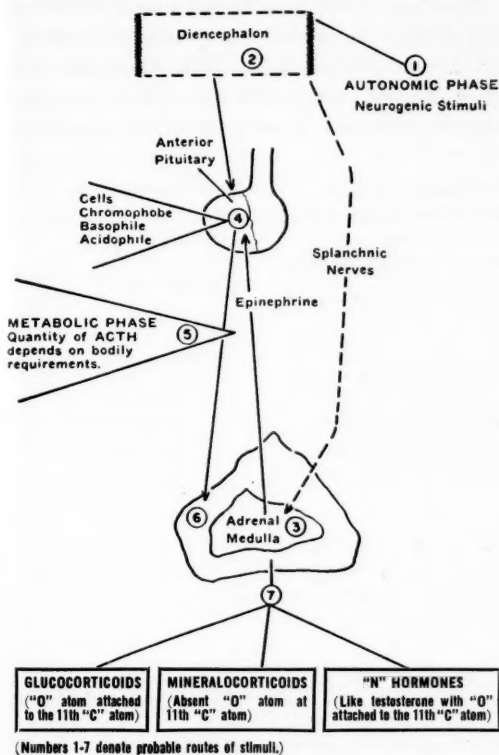


FIG. 1

(Derbes and Weiss, *Untoward Reactions of Cortisone and ACTH*, 1951)

pituitary anterior lobe. At "5" we enter into the so-called metabolic phase of ACTH, and the quantity of ACTH so released depends upon body requirements. The ACTH so released stimulates the adrenal cortex at "6," and the adrenal cortex at "7" releases into the circulation a series of so-called *corticoids*. The first type of corticoids shown contains an oxygen atom at position 11, the second type is the mineral corticoids, the third—the so-called "N" hormones.

Figure 2 shows these various steroids and the effects that they produce. The glucocorticoids include Kendall's Compound "E," which is Cortisone. 11-Dehydrocorticosterone is Kendall's Compound "A." Corticosterone is Kendall's Compound "B," and 17-hydroxycorticosterone is Kendall's Compound "F." In this series one has two compounds available for therapy, namely, Cortisone and hydroxycortisone, which is known as Cortone. The last-mentioned steroid has a localized action; it is used by injection directly into the joint which is affected.

Let us consider the effect of the glucocorticoids. They increase the exogenous conversion of carbohydrate to glycogen. They increase the blood sugar level and cause a mobilization and utilization of fat. They diminish the oxidation of available carbohydrate. They depress adrenal cortico tissue and the thymus. They cause the destruction of lymphocytes and eosinophils, they increase protein metabolism, they decrease protein anabolism, and they increase antihyaluronidase activity. The resistance of the organism to certain forms of stress and strain is increased. There is also an increase in sodium retention and an increase in urinary excretion of potassium.

If one observes the title of these particular steroids, namely, "glucocorticoids," this would lead one to believe that they affect only carbohydrate metabolism. A moment's glance at Figure 2 indicates they have a far greater effect than that and also affect electrolyte balance and protein metabolism.

The second classification of the corticoids obtained from the adrenal cortex is the mineralocorticoids. Desoxycorticosterone and 11-desoxycortisone, which is probably Reichstein's Compound "S," have the following actions: Urinary retention of sodium and chlorine, increase in plasma volume, increase in extracellular fluid volume, diminution in sodium and chlorine in perspiration, and increase in urinary excretion of potassium. One finds here that the action of the mineralocorticoids and the glucocorticoids overlap in a qualitative sense. Nevertheless the

activity on electrolyte balance, that is, the activity on potassium secretion and sodium retention, is about thirty times as great with this second class of corticoids as it is with the glucocorticoids.

The next class, the "N" hormones, are not of especial interest in the treatment of the diseases in which Cortisone and ACTH are used. One finds in this group adrenosterone, and possibly estrone and progesterone. The action in general

differ from Cortisone mainly in that its action is localized at the joint, and is therefore, as I have mentioned before, injected intraarticularly and is not used in the treatment of systemic diseases.

The data set forth in Figure 4 show the effect in a general way on various systems of the body which are affected by ACTH, Cortisone and other of these cortico hormones. Let us consider first the endocrine glands with ACTH. One finds

GLUCOCORTICIDS	MINERALOCORTICIDS	"N" HORMONES
Cortisone (Kendall's Comp. E) 11-Dehydrocorticosterone (Kendall's Comp. A) Corticosterone (Kendall's Comp. B) 17-Hydroxycorticosterone (Kendall's Comp. F)	Desoxycorticosterone 11-Desoxycortisone (Reichstein's Comp. S?)	Adrenosterone Estrone (?) Progesterone (?)
Actions: Gluconeogenesis ↑ Exogenous CHO to Glycogen ↑ Blood sugar level ↑ Mobilization and utilization of fat ↓ Oxidation of available CHO ↓ Adrenalcortical tissue and thymus Destruction of lymphocytes and eosinophiles ↑ Protein catabolism ↓ Protein anabolism ↑ Antihyaluronidase activity ↑ Resistance of organism to certain forms of stress ↑ Na retention ↑ Urinary excretion of potassium	Actions: Urinary retention of Na & Cl ↑ Plasma volume ↑ Extracellular fluid volume ↓ Na & Cl in perspiration ↑ Urinary excretion of potassium	Actions: Retention of Nitrogen Phosphorous Potassium Na Cl

(Derbes and Weiss, *Untoward Reactions of Cortisone and ACTH*, 1951)

FIG. 2

of these steroids is the retention of nitrogen, phosphorus, potassium, sodium and chlorine.

Figure 3 shows the chemical formulas of the two substances obtained from the adrenal cortex which are available in the treatment of the collagen diseases. One of these is Cortisone. One notes that it has an oxygen atom at position 11, and it was the thirty-seven step synthesis, that I mentioned in my introductory remarks required to get that oxygen atom at that special position in the steroid nucleus.

Now if one passes from the so-called Compound "E" of Kendall to Compound "F" of Kendall, one has hydrocortone, which has a hydroxyl group at position 11, and appears to

when ACTH is given the pituitary gland shows an increase in basophilic cells, and some of the chromophobic cells show stippling. One finds that the adrenal cortex is stimulated by the administration of ACTH. Its activity and even the tissue of the gland itself are depressed by the administration of Cortisone. The pancreas is affected by both ACTH and Cortisone. Each appears to be diabetogenic. As a matter of fact, in laboratory animals one can show that repeated injections of ACTH or Cortisone can produce hydropic degeneration of the beta cells of the islet tissue similar to the effects obtained by the administration of alloxan, which produces a so-called alloxan diabetes. The thyroid gland

is depressed, the action on the gonads appears to be capricious. In certain laboratory animals, with perfectly massive doses of either ACTH or Cortisone it can be shown that the testes undergo regression. However, clinically the activity does not appear to be marked.

Regarding electrolyte balance, one finds that potassium, nitrogen, calcium and phosphorus show a negative balance under the effect of ACTH or Cortisone. Now let us discuss each one of these separately. The excretion of potassium in large quantities is frequently the cause of the muscular weakness, the fatigability and

Now the cardiovascular system, and first, let us consider blood pressure. In normotensive individuals there is little change in blood pressure from the administration of either ACTH or Cortisone. In those patients which are inclined to be hypertensive or who have definite primary hypertension, the blood pressure frequently tends to rise. Over a period of treatment lasting three or four months, one might expect in people with hypertension an increase in blood pressure of thirty over twenty millimeters.

Neither of these substances directly has an effect upon the heart. Nevertheless one may

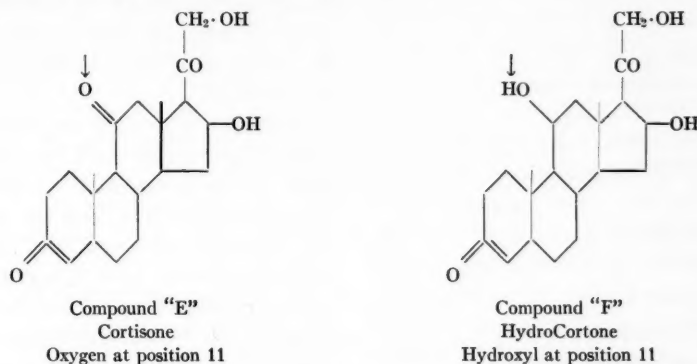


FIG. 3

possibly the collapse of the individual under Cortisone or ACTH treatment. The excretion of nitrogen is important owing to the excretion of an abundance of uric acid and other nitrogenous waste. This gives rise to the utilitarian value of ACTH in the treatment of gout. Calcium and phosphorus balance is negative. Excretion of calcium and phosphorus with a concomitant osteoporosis may lead to bone fracture. This of course is in its final analysis due to the fact that ACTH and Cortisone alike cause an excess excretion of the elements of bone, namely, phosphorus and calcium. Sodium and chlorine are retained. Sodium and chlorine retention gives rise to edema very frequently, ascites and anasarca. They put an extra strain on the heart and may precipitate congestive heart failure in a patient who is subject to the disease.

precipitate a cardiac collapse from excessive loss of potassium. One may put extra strain on the heart by the retention of sodium chloride, with the concomitant retention of fluid. These changes in the cardiac activity are manifested in the EKG and very frequently after prolonged treatment with either of the two substances one may find that there is an increase in the QR interval, a flattening of the "T" wave, and in many individuals a reversal of the "T" wave. The cholesterol content of the blood is elevated. Thyroid activity is depressed, oxygen consumption of the individual is diminished and the cholesterol content of the blood somewhat increased by the administration of either of these two substances. There would therefore be a tendency for the production of atheromatous plaques in the vessels, and arteriosclerosis ulti-

mately may be the outcome of prolonged administration of either of these two drugs.

The clotting time of blood is our next consideration. The clotting time of blood and the administration of ACTH is a very important problem, particularly in the post-coronary conditions. One finds that the whole matter in the literature is polemic. However, at the present time there are certain facts that seem to stand

1. Endocrine glands
 - a. Anterior pituitary
 - b. Adrenal cortex
 - c. Pancreas
 - d. Thyroid
 - e. Gonads
2. Electrolyte balance
 - a. K, Na, Ca, P, negative
 - b. Na and Cl positive
3. Cardio-vascular system
 - a. Blood pressure
 - b. Heart
 - c. E.K.G.
 - d. Cholesterolemia
 - e. Clotting time
4. Infections
 - a. Diagnosis
 - b. Virulence and duration
5. Musculo-skeletal system
 - a. Muscle
 - b. Bone
6. Skin
7. Central nervous system
8. Gastrointestinal tract

FIG. 4. Effect of ACTH and cortisone on physiological systems and functions.

out in bold relief. For example, Cosgriff studied carefully 175 patients and measured the clotting time of blood under the administration of both ACTH and Cortisone. After prolonged periods of treatment with rather high dosage levels he found that eleven out of these 175 individuals manifested thrombo-embolic phenomena. Therefore must one bear in mind always that each of these substances appears to give rise to a more rapid clotting of the blood, and if they are to be given to people who have a history of coronary disease this should be taken into consideration.

Infections are very frequently masked by the administration of these agents. ACTH and Cortisone are antipyretics. What is more, they oftentimes cause a diminution of the white cell count, followed by a rise in total white cell count. It is possible for the administration of these substances to mask an infection that is present in the patient. Now the virulence and duration of the infection is also affected by the administration of the drug. Tuberculosis, staphylococcal and streptococcal infections, influenza and other diseases which may be lying dormant may undergo an exacerbation when either of these two substances is administered. What is more, an infection which is already present may be worsened by the administration of ACTH or Cortisone.

Now with regard to the musculoskeletal system. I have already said that the muscle undergoes a serious metabolic injury when it loses too much potassium, and the cause of much of the muscular weakness and fatigue upon the administration of these agents appears to be due to muscle loss of potassium. One, of course, can combat this by administering to the patient, during the giving of ACTH or Cortisone, potassium chloride or some other potassium salt.

And now bone. We have already spoken of bone and the osteoporosis which results from the negative calcium and phosphorus balance. The possibility of spontaneous fractures has also been mentioned.

Let us consider the skin. A series of symptoms that occur very frequently upon the administration of ACTH or Cortisone are manifested in the skin,—acne vulgaris, hirsutism in different parts of the body, loss of hair in the scalp, the typical Cushing syndrome. One finds the buffalo distribution of fat under the skin, also that the skin very frequently may become very sensitive, and a very definite erythema may result from the administration of Cortisone or ACTH.

Next the central nervous system. Hench, in his first paper on the use of Cortisone in the treatment of rheumatoid arthritis, noted that his

first patients experienced euphoria, buoyancy and overconfidence. Volubility, garrulousness and a desire to do many things that they had never done before were often encountered. Very frequently this is followed by a state of depression; schizoid episodes are sometimes noticed and anxiety states are very frequently produced. One is convinced that many personality changes may be produced by the administration of either ACTH or Cortisone.

As the cardiac changes can be observed in the electrocardiogram, one further asks, can the changes in the brain be registered in the electroencephalogram? Yes, it is possible. After the continued administration of either ACTH or Cortisone one finds a disappearance of the regular alpha rhythm. One also can find spiking, similar to that which occurs in epileptic attacks. Convulsions and coma may occur after the prolonged administration of ACTH and Cortisone.

The last point to discuss is the administration of these drugs with regard to the gastrointestinal tract. It appears from extensive study that these drugs in many individuals give rise to nausea, vomiting and epigastric distress. If the patient has also ulcer diathesis an active ulcer may result. Many clinicians have estimated that as many as seven per cent of the individuals to whom ACTH or Cortisone is administered for long periods of time will show erosion of the duodenum or frank ulceration. Therefore active peptic ulcer is certainly a contraindication with regard to the administration of these substances.

In closing this discussion one cannot help but be impressed by the fact that if an oxygen atom is put in the 11th position of this nucleus (figure 3) profound changes can be brought about in the human body affecting nearly every system, every cell of the body. One is reminded of what the Psalmist said: "We are fearfully and wonderfully made." Thank you.

DR. WARDE B. ALLAN: Thank you very much, Dr. Krantz, for what I can really say with enthusiasm is an excellent summary of a very

complicated situation and put into language that I can understand, and I hope many of you are with me in that regard.

DR. WARDE B. ALLAN, *Moderator*: We will now call upon Dr. Harvey to recount some of his clinical experiences with these two substances.

DR. A. MCGEE HARVEY⁵: Mr. Chairman, Members of the Faculty and Guests, when one listens to a description of the manifold physiological effects which take place following the administration of these hormones, as has just been very nicely elucidated by Dr. Krantz, one would get the impression that any patient who receives either Cortisone or ACTH is somewhat in the position of the one-horse shay; the physician might expect him to fall completely apart, but fortunately that is not the case. Most of these effects can be controlled without abolishing the desirable therapeutic effect that one is striving for in the average patient without much difficulty and with a very simple set of rules.

Most of the difficulties that Dr. Krantz has outlined arise from either failure to observe these simple rules or, in some patients who are receiving very large doses of either ACTH or Cortisone and over very long periods of time.

Now I think it important to remember one thing before we start the discussion of what the practical aspects are in treating patients as far as these physiological effects are concerned, and to get certain basic concepts clear. First of all except in a very few instances what we are actually doing with these hormones in the patient is quite different from what we are used to doing with most other hormonal substances. Now in a situation where you have a patient with myxedema, and you give that patient thyroid hormone you are actually substituting the hormone that the body itself is no longer able to elaborate. In certain instances that is what one does with ACTH or Cortisone. For instance, in the patient

⁵ Professor of Medicine, School of Medicine, The Johns Hopkins University.

with anterior pituitary insufficiency post-operative or spontaneously developing, one is actually with ACTH replacing the ACTH that the patient can no longer elaborate. In a patient who has Addison's disease, or in a patient who has had a bilateral adrenalectomy for hypertension or cancer, the Cortisone that one administers to that patient is substituting for the Cortisone that that patient through his own pituitary adrenal system can no longer elaborate. But in most instances where we use ACTH and Cortisone, it is not substitution therapy. We are deliberately increasing the level of adrenal cortical activity. In other words, we are deliberately trying to produce certain of the things which Dr. Krantz has outlined and what we are after in order to get the effective result that we want is to avoid the untoward effects from this physiological excess activity which produces these various things that Dr. Krantz has outlined. We want to get our therapeutic effect and at the same time minimize the dangers from the overstimulation which we are deliberately producing, so that we are not dealing here with toxic effects of these hormones. Here we are deliberately raising the level of certain physiological activities of the patient, by use of hormones which the patient himself in most instances is capable of producing at a certain level.

Now let us recall for a moment the fundamental difference between ACTH and Cortisone. It is important to remember that with Cortisone therapy one is directly raising the level of the circulating adrenal hormone; that is the circulating level of the 11 oxysteroid that he pointed out to you is the compound which produces the therapeutic effect.

Now when we raise that level, we do certain things to the patient's own pituitary adrenal system. When you raise the level of circulating 11 oxysteroid by administering Cortisone or hydro-Cortisone which is Compound "F," the patient's own pituitary activity is suppressed which means in turn that the patient's own adrenal is no longer getting the normal stimulus from the pitui-

tary so that the patient's own adrenal actually will decrease in size and cease to put out its normal amount of hormone. So that you are producing a depression of the patient's own pituitary adrenal system.

Now with ACTH you are doing quite a different thing. You are in all probability suppressing the activity of the patient's own pituitary but if the ACTH is given for a very long period of time, you are actually causing his own adrenal to enlarge; the diametric opposite situation to what you have with Cortisone. Not only are you causing it to enlarge but that adrenal will put out the whole spectrum of adrenal hormones, the glucocorticoids, the mineralo corticoids and the androgenic substances, so that there you are raising the level in the body of the whole spectrum of adrenal hormones with ACTH, whereas with Cortisone you are administering only the glucocorticoid, the 11 oxy-hormone and probably are to some extent suppressing the output of the other two types of hormone.

Now first of all Dr. Krantz pointed out to you that the administration of ACTH and Cortisone has a very definite effect on other glands of internal secretion. Now that is a very important point because I think that many of us do not stop to realize when we administer these substances it is not like determining the level of sulfonamide in blood and knowing that that is the single factor that is changing. When you give one of these hormones it has an effect on the patient's own pituitary, the patient's own adrenal and it completely changes the whole pattern of his total endocrine function.

Now when one realizes that, it is very simple to see why thyroid function is affected because the anterior pituitary puts out as you know, a thyroid-stimulating hormone and when the patient's own pituitary is suppressed the patient's own pituitary puts out less of that thyroid-stimulating hormone. So that if you give ACTH or Cortisone long enough you can detect depression of thyroid function although in a very large experience, we have yet to find that

to be a clinically significant finding. It has been reported by others but it has not been a very important situation in our experience.

Also as you know and Dr. Krantz has pointed out, these substances do have a diabetogenic effect. They will raise the blood sugar if they are given in sufficient amount for a sufficient length of time and particularly in patients who have pre-existing diabetes or the anlage of diabetes. Gonadal function may be depressed but that again is not a very serious problem from the clinical point of view.

Now perhaps the most important effect of ACTH and Cortisone from the practical point of view is its effect on electrolyte metabolism, the retention of sodium, and the stimulation of loss of potassium. Those are the two most practical effects that we have to deal with, and as I will tell you later in giving you some figures on our experience with the detection of these abnormal physiological effects in patients, we'll see that these are among the most important ones. It is quite clear from the experience in patients, that these problems can be very easily handled if one understands the problem at hand and follows certain very simple rules for avoiding difficulty.

First of all, retention of sodium. You all know and Dr. Krantz has outlined the potential effects of excessive retention of sodium. One has no different problem here than what one sees in patients who go into congestive heart failure. You are creating that sort of situation really in the normal individual. The patient retains sodium, his blood volume increases, his extracellular volume increases and if it goes to a great enough extent he will become edematous, congestion may develop in the cardiovascular system with all the clinical manifestations of cardiac insufficiency.

Now in the patient who has normal kidneys, one can with restriction of sodium to a sufficient degree avoid the development of edema or avoid any really serious complications from this physiological effect of these two substances.

We have had no difficulty with patients gaining weight due to retention of water or to the development of overt edema or development of heart failure since early in the game, when we have routinely restricted the intake of sodium to four grams or less, no matter how much ACTH or Cortisone the patients were getting or for how long a period. We have routinely done it to avoid difficulty and that is a very successful means of doing it and a very simple one if you follow it rigidly in patients who are receiving these hormones.

Now equally important is to follow the simple rule of taking care of the expected loss in potassium and that is very simple to do. One can give the patient a potassium salt to take by mouth while he is taking ACTH and Cortisone and again, if that is rigidly followed in every patient there will be no difficulty from low potassium syndrome. We routinely give patients from three to twelve grams of potassium chloride by mouth each day while they are taking these substances, the amount depending on how long they are going to be treated and what dosage level they are going to receive. If one rigidly follows the program of having these patients limit their salt intake and add potassium to their program, serious difficulty from the effects of either sodium retention or potassium excretion can be avoided.

There are circumstances, however, when more drastic measures must be taken and when difficulties may arise. In the patient who already has a situation where he is retaining sodium as in a patient with renal disease or in a patient with cardiac insufficiency and inability to excrete sodium properly, then one obviously has a much more dangerous situation. Under those circumstances I do not think that these hormones should be given unless the indication is so imperative that one has to overlook the dangers involved.

Under those circumstances even when the patient has pre-existing hypertension or has had a pre-existing heart disease with evidences of

cardiac insufficiency or when the patient has already had some kidney difficulty which has impaired sodium excretion, we have seen situations in which it was still a matter of life and death as to whether the hormones were given. We have proceeded without any serious difficulties in those instances by very rigid restriction of sodium down to an intake of fifty milligrams a day and added potassium. Also one other thing and that is to remember the difference between ACTH and Cortisone.

As Dr. Krantz has pointed out, the glucocorticoids which Compound "E" and "F" are examples of, do not stimulate the adrenal. They do not have as potent a sodium retaining effect as does desoxycorticosterone which comes from the adrenal and which you will have the adrenal excrete if you give the patient ACTH under situations where you want less sodium retention. Then it is better to use Cortisone I think, than to use ACTH.

Now if you use Cortisone by mouth the duration of its effect is relatively short, so that you are producing intermittent elevation in the level of adrenal activity and under those circumstances it is possible in most instances to get the therapeutic effect that you desire without the dangerous level of sodium retention, provided you also very rigidly restrict the sodium intake and by all means add potassium to the patient's therapy.

Now potassium deficiency which may develop during the use of these hormones can be somewhat difficult to recognize if one is not aware of it and suspicious of the possibility. As you know the lowering of the serum potassium leads to muscular weakness, to loss of the deep reflexes, has an effect on the cardiac muscle and the patient will develop cardiac collapse. During that situation the patient may have abdominal distention. They may complain of cramps and pain in the abdomen and it may in many respects simulate an abdominal emergency, so that when one sees those symptoms develop in a patient receiving ACTH and Cortisone, it is wise before

calling the surgeon to take an electrocardiogram, to test the deep reflexes and try to determine the presence of potassium deficiency and take proper steps to alleviate it and see if that does not, as it always will when enough potassium is administered, cause a prompt reversal in the difficulties.

Under circumstances when one has a picture that looks as though it may represent an abdominal emergency situation requiring surgery when the patient is under ACTH or Cortisone, as Dr. Krantz has pointed out, another confusing element may be present and that is the leukocytosis which always develops in patients receiving adrenal stimulation from ACTH, or who have received any sizeable amount of Cortisone.

The effects on blood pressure also stem largely from this problem of sodium retention. They have occurred just as frequently in patients who were normotensive to begin with as those who were hypertensive. In fact about half the patients we have treated who have been hypertensive to start with have shown some drop in blood pressure during treatment. The danger, of course, in the presence of hypertension is again in those patients who have already had symptoms of heart failure or who have renal disease and who cannot excrete sodium as well as the normal individual. It is in those two situations that the real danger exists.

Now one other problem in relation to the cardiovascular system which Dr. Krantz has touched on and has pointed out to you as a somewhat controversial subject, that is, just what ACTH and Cortisone do to the blood-clotting mechanism. There has been as he has said, a great deal of dispute on this subject. Some people have said the clotting time is prolonged; others have said it is reduced; some have said prothrombin time is prolonged, others have said it is reduced, but I think the situation is really that they do not have any very important practical effect on blood clotting mechanisms in the average doses in which they are used clinically. We have seen only a very few

situations in which phlebitis or thrombophlebitis or any other type of thrombosis has developed in patients receiving these substances, and in almost every instance that has been in patients who had some type of vascular disease which already created a situation which predisposed to the development of clotting in vessels. That is, some disease involving the arterial walls as in lupus erythematosus, or periarteritis nodosa or in people who already had a very serious chronic debilitating disease. From a practical point of view I think one has to be cautious in terms of these complications and to keep their possibility in mind just as one does in patients who are not receiving ACTH or Cortisone.

Now what are the practical problems in relation to infections? Well, as Dr. Krantz again has pointed out, in almost any patient having fever, if you raise the level of his adrenal activity with either ACTH or Cortisone there will probably be a drop in his temperature, in most instances to normal levels and in many instances, if your level of stimulation is high to even sub-normal levels.

These substances have a very strong stimulating effect on the bone marrow. They'll cause in almost every instance a leukocytosis and the appearance of many young forms in the peripheral blood. That is a physiological effect of overstimulation so that one is almost always confronted with the situation in which the patient has a leukocytosis and where the patient's constitutional reaction is depressed in terms of his ability to develop a fever or to show changes in pulse rate, or to localize pain well. One has a situation in which the development of an infection may be masked.

There is one other situation which Dr. Krantz didn't touch on in any detail but which may be very important in this sphere and that is, in patients receiving ACTH and Cortisone, if the amounts are reasonably large as necessitated in some instances, there may be a depression of wound healing. Now the reason for that is a depression in the ability of the body to form

granulation tissue. Epithelialization can occur perfectly alright but the body cannot lay down granulation tissues satisfactorily as in a person who has normal adrenal function. That is an observation which has long been recognized in patients with Cushing's disease, and if you have an infection under these circumstances which starts out as a local infection, the body may not be able to keep it local and to wall it off. And so the infection may spread and be a generalized infection when ordinarily it would be a local affair.

There is a great deal yet to be learned about the situation in regard to infections. There is no question but that during administration of these hormones one may see the development of a bloodstream infection. We have seen that in about five per cent of the cases, again mostly in individuals with diseases in which that situation might be expected to arise anyway—that is in patients with leukemia; other types of blood dyscrasia, with a type of disease in which infection already tends to develop such as in patients with various types of collagen vascular disease. So again it is very difficult to tell many times how much is the disease and the lowered resistance of the patient and the inability of the patient to call on his normal means of combating infection and how much of it is due to ACTH and Cortisone. One must be aware of that possibility, and again attempts should be made to clear up any infection before these substances are used and their use should be avoided, I think, in patients who already have infection, again unless the indication is very great for their usage.

Now there is, as you probably have seen in the literature, a growing effort on the part of certain people to use these hormones in patients with overwhelming infections. This stems from the fact as we have already pointed out that the constitutional reaction to severe infections is suppressed—that is, the fever goes down, the patient feels much better, his appetite improves and he looks generally relatively normal and

feels well even in the presence of an overwhelming infection. We have seen that in patients with generalized peritonitis.

Now, what is the mechanism by which ACTH produces this blocking of the body's normal recognition of the presence of an infection and the body's usual response to that infection in terms of fever and malaise and chills and other changes which come about under those circumstances? Well, no one knows that, but it looks as though it occurs at the cellular level, that the body does something to prevent the action of the bacterial toxins on the cells of the body either by blocking their access to the cells or by protecting enzyme systems in those cells to the effect of the toxin or possibly by other mechanisms. In any event it seems to take place, and there have been many patients treated now with overwhelming infections and the results are very difficult to interpret. It has been done on the basis that if one uses sufficient antibiotics, that by eliminating the usual toxic effects of the infection—no one knows exactly what they mean or what their purpose is really—but that one may save the patient if those effects can be blocked and without doing any harm if antibiotics are maintained.

For instance, Dr. Kinsell has now treated a good many children who have come in with a perforated appendix, seriously ill in coma and the terminal stages of generalized peritonitis, by giving antibiotics plus ACTH or Cortisone, and he feels very definitely that it has been a life-saving measure in many of those situations. He has found that within a few hours their clinical condition improves rather dramatically, and if the antibiotics are then continued and ACTH or Cortisone stopped, that the patient's condition becomes more critical again. So that he feels that the situation seems to be a fairly definite one in terms of the advantages of using antibiotics and Cortisone in those desperate situations.

I'd like to caution you however about it. We do not yet know whether ACTH or Cortisone

in any way interferes with the effect of antibiotics, and we also, as I pointed out, do not know what we may be doing when we suppress the usual reactions of the body to infection. Nevertheless that is the situation at the moment in which it looks as though in certain of those critical situations where antibiotics alone are obviously not going to handle the problem, that ACTH or Cortisone have been tried.

Now you've probably heard a good deal about the problem of ACTH and Cortisone in patients with tuberculosis. That again has many aspects to it. The effects are varied, depending on the species of tubercle bacillus and the host in which the infection has occurred. Some investigators have said there was no effect; others have said there was a very deleterious effect and under the influence of these substances the tuberculous infection may become very widespread. There are no final answers. All I have to say is that I think at the present time that in general the use of ACTH or Cortisone in patients with tuberculosis should be avoided, unless it becomes a life-and-death matter.

One other important problem is in relation to the apparent deleterious effect of ACTH and Cortisone in certain infections. It is the problem that the general practitioner runs into in the patient who comes in with a fever and in which the cause of that fever is not clear. I am speaking particularly of two situations where one must use great caution in administering these drugs. It has been shown experimentally that the course of poliomyelitis is made very much worse by raising the level of adrenal cortical function. I think you are all well aware that it has been recognized for some time that poliomyelitis was always a much more serious disease when it developed in the pregnant woman who has already raised her own level of adrenal function. Experimentally it has now been shown the disease is much more fulminating in animals who are given ACTH and Cortisone. Do not use these substances until the diagnosis is clear and particularly when it conceivably could be

poliomyelitis. At times another very difficult disease to diagnose in the child is rheumatic fever. There is no question that one can suppress the active manifestations of rheumatic fever (fever and arthritis), with these substances. It is still not clear as to what the eventual effect is going to be in relation to the tissue changes that are taking place in the heart itself. We do not know at what level they have to be treated to prevent the progression of lesions in those areas or whether it can be done. That is all under study at the present time, but there is no rush about giving ACTH and Cortisone to a patient with rheumatic fever. At times as you know, it may be very difficult to make that diagnosis. Under those circumstances if the child has some other type of infection, one may get into a serious situation by giving these hormones when the diagnosis is not clear and when it is possibly some type of infection.

Now the problem in relationship to those complications involving the skin and mucous membranes is clinically from a practical point of view mainly of cosmetic interest. Hirsutism rarely develops unless very excessive amounts of these hormones are given over a long period of time. It rarely is a problem except in the darkhaired woman whose facial hair has always been not visible and becomes dark and excessive under use of these hormones; that most often will regress and is something to watch under those circumstances but it is not a very serious problem. Very occasionally as has been known previously in patients with Cushing's disease, all the hair from the scalp may be lost and in our experience that has occurred in a very small group of patients. Some of them already had some reason for losing their hair in terms of the fact that they had an atopic type of dermatitis.

Acne may appear but it is usually a transient phenomenon and is in our experience infrequently seen except in those who have to have high dosage therapy for a long period of time. Occasionally, particularly with ACTH and again in the dark-skinned individual, one may see some

deepening of pigmentation which again may be of cosmetic difficulty for the patient but otherwise has no serious imports and again will decrease when the drugs are stopped or the dosage materially lowered.

Now we have referred briefly to the problem of wound healing. At ordinary therapeutic levels I don't believe that is a serious problem. We operate on patients who are receiving these hormones. However, if it is going to be a major operation or where wound-healing is an important problem, we try and keep the level of adrenal hormone administration low and eliminate it if possible soon after the operative time so we can be certain that healing will not be interfered with.

To give you an example of the situation you may run into, we have a patient who is being operated on today who has a hemolytic type of anemia. Her anemia responds very promptly to Cortisone administration. Hematocrit comes right up to normal levels and stays there, but it takes about 300 milligrams of Cortisone a day to suppress the reaction. When you drop her to 250 milligrams, the hematocrit begins to drop pretty rapidly. Obviously she can't stay forever on three hundred milligrams of Cortisone a day. We are going to try and relieve her situation by removing the spleen. Now she is going to the operating table taking 300 milligrams of oral Cortisone a day, but as soon as her spleen is out we feel that the problem will be helped in all likelihood. In any event we have control of the situation because oral Cortisone is excreted very rapidly. We can reduce this excess function of her adrenal very promptly. We propose to do so fairly rapidly in the post-operative period so that we will not get into the problem of retardation of wound healing.

I have little to add to what Dr. Krantz has already said about central nervous system difficulties. One must recognize the possibility of the development of serious mental reaction under large dose-long term usage of these hormones and recognize the fact that in most peoples' experi-

ence, it has developed in situations where the patient already had a serious emotional problem to which he was pretty well adjusted. However, when you disturb his physiological environment, suddenly his adjustment breaks down and you are faced with a serious situation in terms of very violent psychotic reaction. This usually will subside, although if the patient already has had an unrecognized or fairly well compensated psychological difficulty, one may find that recovery is not so easy to bring about. It is important to try and recognize the existence of that situation before treating patients and not to treat them unless absolutely necessary when they have had or are having emotional difficulties.

Finally, the gastrointestinal tract. ACTH supposedly does several things to the gastrointestinal tract. It increases the secretion of hydrochloric acid in the stomach. It increases the secretion of pepsin and also affects protein metabolism by the stimulation of excessive protein break down. One has a series of events which may be very deleterious in terms of the patient with a peptic ulcer. However, from the experience thus far, it is very difficult to know whether complications from peptic ulcer develop more often in these patients than they would if they were not treated and had the same diseases. Nevertheless ulceration seems to have been aggravated in a few instances during the course of treatment. That can usually be handled quite well if it is really necessary to continue treatment by putting the patient on a regular ulcer regime with diet and proper anti-acid therapy.

In our experience with about five hundred patients, we have had no perforation of a peptic ulcer. Nearly three per cent of the patients have developed ulcer symptoms, many of whom already have had an ulcer. In most instances when it was necessary to continue therapy there has been satisfactory response. Perforations have been described and again one must remember that the usual reaction of the body to the peritonitis which develops may be suppressed, the

patient may have a perforation with a general peritonitis, no fever, no abdominal rigidity, no change in pulse rate and very little pain. So that the perforation may sit there and peritonitis may proceed for several days before one recognizes what has happened. It is very important to be on the alert for this complication and again to take the proper precautions in patients who have had ulcer symptoms, and again not to treat them unless it is essential to do so.

Gastrointestinal hemorrhage of a massive type may occasionally develop, usually in situations where there is a pre-existing reason, the patient having a previous ulcer or some disease involving the gastrointestinal tract. That has happened very infrequently in our experience but again it is a possibility which must be watched for in patients who are receiving rather intensive treatment.

Getting back for just a moment to the problem of bleeding in contrast to the problem of thrombosis, in most instances where the patient already has a hemorrhagic tendency even though the blood abnormality associated with that hemorrhagic tendency may not be changed by therapy, in our experience in most instances the bleeding tendency has been suppressed. In a patient with a thrombocytopenic purpura the bleeding may subside to a large extent before there is actually any change in the platelet count. Why that occurs no one knows for certain. It has been suggested that these substances do alter capillary permeability and may in that way affect the tendency to bleed.

In closing I would just like to give you one or two words about my philosophy since no one has said anything about the indications for the use of these substances and that is a very large field. First of all we have no evidence that any disease can be cured by the use of these substances. One can alter the activity of the disease but one cannot cure any disease. That is the first important thing.

Remembering that fact, it is always a help

to classify the types of disease that one is called upon to consider treating with these substances, into four major categories. (1) those diseases in which there is a pituitary or adrenal cortical insufficiency. That is a simple matter, there is no question about their usage there, that is substitution therapy just like giving a thyroid extract to a patient with myxedema. (2) we have a certain group of diseases which are self-limited, either self-limited or in which the cause of the disease can be removed. Now there the classical examples are sensitivity reactions to various drugs such as penicillin or horse serum where one can use high dosages over a short period of time, very rapidly relieve the discomfort of the patient, remove the cause of the disease so that one doesn't have to worry about the untoward effects in that situation. Secondly, another example of a self-limited disease is sympathetic ophthalmia where the patient apparently becomes sensitized to his own uveal tract pigment. That disease eventually burns itself out, but in the process of doing so the inflammatory reaction which it sets up usually damages the eye to such an extent that the patient either loses a large portion or all of his vision in both eyes.

One can maintain a suppression of that inflammatory reaction with ACTH or Cortisone during the life period of the activity of that disease and preserve the patient's sight so that certainly one is going to use it in such circumstance. Then (3) those chronic diseases which in most instances do not endanger life but do cause serious discomfort and limitations of the patient's activity. I think that one must consider the use of these hormones in that type of disease when other and simpler measures of treatment have been without avail. For instance the patient with chronic intractable asthma who has not responded to other measures of treat-

ment, may find in many instances with perfectly safe dosages over a long period of time sufficient relief, to radically change his whole life program.

In the last (4) category are those diseases, either chronic or acute which, if the activity is not suppressed we know will in a vast majority of instances be fatal. In such a situation I think that one is justified in using enough of these hormones to keep the disease under control, even at considerable risk. Periarthritis nodosa is an example and, disseminated lupus erythematosus is another. Now of course in that category fall the usage of these hormones for increasing the comfort of a patient at times, having a fatal disease. At times the patient with a metastatic disseminated neoplasm may have his fever suppressed. A poor appetite may be stimulated. He may develop a sense of euphoria and well-being. Often it is a much more satisfactory type of symptomatic therapy than the use of large doses of narcotic or other means to try and make patients comfortable.

In closing I think that if one understands the basic action of these hormones, if one follows the simple rules in each case; if one recognizes the situation in which harmful reactions are apt to occur; if one recognizes also the fact that when considering long-term therapy that there may be subtle effects of these hormones still not understood, and if one takes those facts and tries to balance them against the seriousness of the disease and the need for adrenal therapy, I think one can in most instances formulate a fairly sensible program both for the comfort and help of the patient and to the advantage of the physician.

DR. WARDE B. ALLAN: Thank you for an illuminating discussion of a vast clinical experience with ACTH and Cortisone.

QUESTION AND ANSWER PERIOD

Q.: How does one decide whether to use ACTH or Cortisone?

DR. HARVEY: That depends on a good many facts. I don't think we have all the information on which to base a completely documented answer to such a question. In general I think if one is dealing with a disease which requires a fairly high level of adrenal activity to bring about suppression of activity, that if possible, ACTH should be used. That has been our general experience and we feel safer under those circumstances because if the patient for some reason has to stop therapy, you do not face nearly the danger from sudden adrenal insufficiency as you do if you withdraw a large dose of oral Cortisone particularly rather suddenly, which is a dangerous thing to do. We have a good many patients with chronic asthma, who have been taking oral Cortisone which is obviously much more convenient to do over long periods of time and at sufficiently low dosage levels, around 50 milligrams a day. Such dosage does not seem from ketosteroid studies and observations, to have seriously suppressed the patient's own adrenal activity, and we have yet seen no difficulties under those circumstances but I think that one must still proceed with caution in long-term therapy and particularly if one has to exceed 75 milligrams of Cortisone a day or probably twenty to thirty milligrams of ACTH a day. Now there is one important thing to remember and that is this whole problem of ACTH intramuscularly. In the early period Armour was making a relatively unpurified material which had only an activity of about one unit per milligram. That substance and its impurities apparently led to a situation when it was placed in muscle, whereby there was some actual destruction of the ACTH. That is probably the reason why there was such variation from patient to patient in the amount of ACTH required intramuscularly to get the proper therapeutic response for which one was looking. Dr. Astwood recently, by absorbing the pituitary

material on oxidized cellulose, has been able to concentrate it to a point where it contains about eighty units per milligram. That, of course, is a much more purified material and thus far it seems to be free from this destructive activity that goes on in muscle. Apparently it has something to do with the impurity of the material and so far that has not been seen. Theoretically there is evidence already obtained, to suggest that one will be able to obtain with the ACTH gel, just as good adrenal stimulation over a twenty-four hour period as one can obtain with intravenous ACTH in unit per unit.

Q.: How about diet in the patient on ACTH or Cortisone?

DR. HARVEY: If the patient has any tendency to diabetes at all or has diabetes even in mild form or even in the normal individual, the following type of diet would seem to be indicated, e. g., a high protein, preferably 150 to 200 grams of protein a day because of the tendency for increased protein breakdown and secondly because of the fact that these hormones stimulate gluconeogenesis and, as you say, increase the appetite and the patients eat more carbohydrate. They probably should have some limitation of carbohydrate in their diet and perhaps some increase in the amount of fat because these compounds are not ketogenic in the ordinary patient. There is some evidence—it is still pretty slim—that under those circumstances one may actually get a better therapeutic effect than if the patient is on a very high carbohydrate-low fat diet.

Q.: I'd like to ask Dr. Harvey how he feels about the use of ACTH or Cortisone in either virus hepatitis or cirrhosis?

DR. HARVEY: In patients with cirrhosis, particularly patients who have advanced cirrhosis or in cholemia, there is some type of toxic reaction the cause of which is not clearly known, and why it happens no one quite knows, but in

that situation if you give ACTH or Cortisone in sufficient amounts, you may wake the patient out of his coma and stimulate his appetite. Clinically, he may look a great deal better. As far as I know, there is no real evidence that it is going to change specifically in any way, the outlook of his cirrhosis other than perhaps to improve his appetite and make it easier for you to sort of get the diet into him that you want him to have.

Again in a patient with viral hepatitis with fever, you get the general masking of constitutional reactions. If there is an inflammatory reaction in the liver, we know that ACTH will suppress a variety of types of inflammatory reaction, and so it may be of temporary benefit. There is some speculation that perhaps with the combination of ACTH and some type of antibiotic, one may be able to get the antibiotic into the cell and that is something to explore in terms of the treatment of virus infection or infections of other types in which the organisms live inside the cell as in rickettsial infections but those points are just at a superficial level of knowledge at the present time.

Q: How much specialized laboratory work does the practitioner have to do on patients getting these hormones?

DR. HARVEY: In the hospital where we are studying these patients particularly, we are trying to get as much data as possible so that

we can translate it into answers just as the ones you want. That is the sort of function we try to serve in the introduction of a new drug like this into medical practice. I may say that if you follow those simple rules and if you take the trouble to find out whether your patient has got any renal disease or any situation that is going to lead him to retain sodium in an abnormal fashion, and if you are not going to treat him over excessive periods of time with very large doses, then I think you are perfectly safe if you insist and see that the patient follows your advice of restricting sodium and if you give him added potassium. If you follow the patient's weight and follow the patient's blood pressure and see the patient often enough to pick up any clinical evidences of difficulty, they are going to show up clinically and you don't have to have blood sodium determination. As far as potassium difficulties are concerned, it is pretty simple in most instances if the situation demands it to get an electrocardiogram. That will tell you just as much about potassium level in most instances as blood potassium determination will.

DR. WARDE B. ALLAN: Are there any other questions? If not, we want to thank all the participants from the floor and also the two main speakers and we will now call the meeting adjourned.

NOTICE

The Council on National Emergency Medical Service of the American Medical Association has, during the past several months, sponsored a series of articles on the medical aspects of civil defense which has appeared in the Journal of the American Medical Association.

These articles have now been reproduced in booklet form. It appears from the large number of requests for the booklet that the articles are of genuine interest to the medical profession and the general public. The booklet sells for 25¢ a single copy, and 20¢ per copy for orders of 100 or more.

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MUSHROOM DERMATITIS

H. HANFORD HOPKINS, M.D.*

Every physician is, or thinks he is familiar with the symptoms and signs of poison ivy dermatitis, and "athlete's foot." He makes the diagnosis and prescribes usually without second thought. Nevertheless it is well known to those of us who have a singular interest in diseases of the skin that many examples of contact dermatitis are mistakenly diagnosed "poison ivy," or "ringworm." This is particularly true when the offending blisters present themselves on the hands or feet. The reason for this common mistake of course is that all cases of contact dermatitis look very much alike. Cases differ largely in the distribution, contour and pattern of the lesions. For example poison ivy begins on exposed parts, and the original lesions are in streaks or linear scratch marks. On the other hand nail polish dermatitis is nearly always confined to the eyelids or neck where the polish is inadvertently transferred as the result of a habit of rubbing, or stroking these parts with the painted finger nails. Often it is only when the supposed poison ivy or ringworm fails to disappear, that suspicion is aroused on the part of patient or physician that some other noxious agent may be responsible for the trouble.

The possible causal agents of contact dermatitis are almost unlimited, and new causes are constantly being reported. Most recently colored toilet paper has been incriminated, and such diverse substances as cocobolo wood, bubble gum, hair lacquer and match flaps might be mentioned as examples. Since irrespective of origin, the gross features of contact dermatitis are or can be so similar in all cases, great emphasis must be placed upon the distribution of the eruption in arriving at a correct diagnosis in any one particular case. The history, or present illness, is likewise very important, but can at times be misleading.

* Baltimore, Md.

The purpose of this writing is to point up the above characteristics of contact dermatitis, in the following report of what I believe is a newly found and rather novel cause for contact dermatitis.

CASE REPORT

E. A. W., a healthy white man of forty, complained on March 11th, 1952, of an itching eruption on his hands and eyelids. For about one year he had been working in a mushroom plant where mushrooms are grown commercially. His job consisted of working the beds, and picking and packing the mushrooms in baskets. The manner in which he used his hands to pick and pack proved to be the key to the correct diagnosis, in spite of, as will be shown, a very misleading history.

Four months prior to the first examination he had picked mushrooms in a room which had been heavily and profusely dusted with an insecticide powder said to contain a nicotine compound. Four days after this exposure, blisters appeared on the pads of the fingers and thumb of the left hand, which he invariably used to pluck the mushrooms, and on the pad of the right thumb, upon which impinged the cutting edge of a short knife used to cut off the root of each mushroom before placing it in a basket. It was obvious that the eruption appeared first on those skin surfaces which were habitually most intimately exposed to mushroom or some extraneous coating on the mushrooms. The eruption persisted and in a few days the eyelids became swollen and inflamed. The patient, according to his subsequent story, was convinced that the condition was caused by exposure to the insecticide. He continued to work, but in two weeks was forced to stop because of the severity of the inflammation on his hands and eyelids. A physician who

saw him at this time told him he had "ringworm," and recommended local treatment. At the expiration of two more weeks, he had greatly improved, only to relapse into his former state after returning to work. In spite of local treatment the dermatitis persisted with partial remissions and exacerbations until first seen on March 11th.

On that date the patient presented a severe vesiculo-squamous dermatitis of all the finger pads of the left hand, and the thumb pads of both hands. The eyelids were swollen, erythematous and scaly. The history and distribution of the eruption immediately indicated that it was

caused by contact with mushroom, or the insecticide, and the eyelid involvement due to the same contactant transferred to the eyelids by the fingers. Patch tests proved that the contactant responsible for all the trouble was mushroom itself. Three tests were applied, mushroom, mushroom dusted with the insecticide, and the insecticide alone. The latter produced no reaction on the skin, whereas both the pieces of mushroom produced equally violent positive reactions.

The patient was removed from all contact with mushrooms, boric acid solution compresses were applied, and within seven days return of the affected parts to normal was almost complete.

ANNOUNCEMENT

DIABETES DETECTION WEEK—NOVEMBER 16-22, 1952

For the past two years the Diabetes Detection Committee of the Medical and Chirurgical Faculty has cooperated with the American Diabetes Association in sponsoring Diabetes Detection Week in Maryland. The work of the Committee has had two main parts—first, an intense educational campaign using press, radio, and television stressing the early symptoms of diabetes and urging the public to go to their doctor for a urine test during Diabetes Detection Week, and second, arranging with a group of hospitals for special diabetes detection clinics to be held during this particular week. Last year seven hospitals participated and examined a total of 1161 persons. Of these 72 or 6% were diagnosed for the first time as having diabetes. The success of the educational program urging examinations especially for persons who were overweight, or had symptoms of diabetes or a family history of diabetes, is indicated by the high percentage of those who were found to have diabetes among the groups attracted to the examining clinics.

This year there will be a change. It is our aim to make the campaign effective throughout the state with your cooperation. It is planned not to use centers in hospitals during detection week, and to place emphasis on the educational program. The symptoms of diabetes will be stressed as in previous campaigns and the advice will be: "If you have any of these symptoms *go to your doctor for a test for diabetes.*" This approach cannot work unless there is a full measure of cooperation from practicing physicians. In the publicity no reference will be made to "free" tests and the matter of charges will be left to the discretion of the individual physician. We are confident that you will want to cooperate in this effort to locate and bring diabetics under control and to demonstrate to the Maryland public that practicing physicians have a deep and sincere interest in their welfare, not only while sick, but in preventing serious illness by early diagnosis and prompt treatment.

We have a moderate supply of small posters and educational pamphlets which are available to you on request to the office of the Medical and Chirurgical Faculty.

Our objective with the public during Diabetes Detection Week is to focus attention on this controllable disease and to steer patients to the family physician if disease is suspected. Our objective with you is to urge you to be alert to the possibility of diabetes in your every day practice and to stimulate more extensive and routine use of the modern, simplified urine tests for sugar. Let each physician's office be a diabetes detection center, not only during this week but throughout the year.

THE DIABETES DETECTION COMMITTEE

ARTICLES OF INTEREST

THE ROLE OF THE PHYSICIAN AS A CITIZEN*

AMOS R. KOONTZ, M.D.

The annual meeting of this Society in 1950 was made notable by two addresses. Dr. Albert Chatard, a beloved past-president of the Faculty, gave us a fascinating and charming description of The Doctor—Past, Present, and Future. Dr. Chatard was brought up under that *ideal physician*, Dr. William Osler. He himself has all of his life been one of the leading exemplars of the ideal physician. In his address he again held up that ideal, which I hope that most of us in our professional careers have been *striving* to attain. The other notable address to which I referred was that of our present President, Dr. Austin Pearre, who in a preeminently scholarly and thoughtful address showed us some of the *accomplishments of our country and of our profession*, and also showed how those accomplishments are now being threatened by influences and trends familiar to all of us. Dr. Pearre showed us how, not only the ideals of our profession, but the sacred principles upon which this country was founded, are in danger of being overthrown by a combination of *unscrupulous political planners* and of *visionary impractical theorists*, neither of which has any place in a society characterized by the hard-headed common sense which has always been characteristic of the American people.

It is hardly necessary for me to dwell on the dangers. We are all entirely too familiar with them. The question is what to do about it. The times certainly call for action on our part. The time for talking is over. The time for action is here *now*. *War has been declared*—war against all that we have always held dear and considered worthwhile. If you do not believe it, read some of the current campaign literature, in which one of our major political parties talks about "Better medical care that you can afford." We all

*Read before the Semi-annual meeting of the Medical and Chirurgical Faculty of the State of Maryland, Frederick, Maryland, September 28, 1950.

know that socialized medicine has not proven to be "better medical care" in other countries, and the cost in taxes has been many times higher than the cost of private medicine.

Most of us have been brought up to think that our ancestors, by winning the Revolutionary War, had gained for us an independence such as no other people had ever enjoyed. That was true. Most of us also were brought up to take for granted that that independence would be a *lasting matter*. We have learned by bitter experience that independence is *not* a stable thing, but something that has to be continually *fought for* if it is to be preserved. We are now engaged in our Second War of Independence, and if we do not get out and fight for it, as did the patriots of 1776, we shall certainly lose it. Our opponents are ever vigilant. They work over *week ends and holidays* in order to catch us napping. They are trying to destroy the principle of *local self-government*, which is the foundation stone of democracy, and to concentrate all power in Washington. Local self-government cannot be handled from Washington. One of the greatest debates in history was centered around that very question. I refer to the debate in the Virginia Convention of 1788 on ratification of the Constitution. All members of that Convention were looking for a method of forming a more perfect union. The only question was whether the Constitution, as framed by one of the Convention's own members, James Madison, *would* preserve the rights of the states and the principle of local self-government or would gradually allow all power to be concentrated in the central government. Arrayed on the side for ratification of the Constitution were such great statesmen as James Madison, John Marshall, Edmund Pendleton, Edmund Randolph, George Wythe, Lighthorse Harry Lee, and Bushrod Washington. George Washington was not a member of the Convention, but favored ratification and lent the weight of his influence for it through correspondence from Mount Vernon. (Jefferson was in the then far away Paris, as Minister to France, and was not involved in the debate at all.) Lined up on the side against ratification were equally great men, such

as Patrick Henry, George Mason (who wrote the Bill of Rights), Benjamin Harrison, Richard Henry Lee, John Tyler, and James Monroe. Never did any question of personal interest enter into the debate. Never was a debate conducted on a higher plane. Seldom, if ever, in all history have such great orators been arrayed against each other, and although they *were* arrayed against each other, they were motivated by one common purpose, and one purpose only, and that was what was best for the budding nation. The only difference of opinion was that those *for* ratification believed that the Constitution *would* safeguard the interests of the people and preserve the principle of local self-government. Those *against* ratification believed that the Constitution would allow the governing power gradually to become concentrated in the central government and that this *would eliminate* the principle of local self-government, making the States mere satellites of the central body. Were all those great debaters alive today, they would be on the same side, fighting against the destruction of the dignity of the individual and of the independence of the local community. They would be amazed that the Washington bureaucrats had succeeded in doing just what the Constitution meant they should not do.

The advocates of the so-called reforms, which have been going on in our government during the last decade or two, will tell you that their plans are *not* socialistic. Some of us, however, have been studying the dictionary longer than they have, and are capable of interpreting it better. I shall not bother you with quoting Webster to prove that their plans are socialistic. I know that that is unnecessary for this audience. I will concede, for instance, that Federal aid to medical schools by itself is not socialism, but Federal aid to medical schools, *plus* TVA, *plus* social security, *plus* the Brannan plan, *plus* national compulsory health insurance, *plus* the redistribution-of-the-wealth schemes, practically would make us a *purely socialistic state*. There are too many people who talk one way and act another, both in and out of Congress. There are too many people who decry socialism, but who want to get help from the Federal government *for their own particular school*, or their own particular locality, not realizing (or seeming not to realize) that if the Federal government gives

help to *enough things*, we will have no government except the Federal Government, because the Federal government will have *all the money*, and not only will our local independence be gone but the country will be bankrupt as well.

Last year Maryland paid \$754,000,000 in Federal taxes and got \$50,000,000 back. If we were allowed to keep our own money, as the Constitution meant for us to do, and run our own affairs, it is obvious that we would not have to ask anybody for money for anything.

Robert Louis Stevenson once spoke of the doctor as "the flower of our civilization," and most eloquently gave his reasons for thinking so. You and I have been brought up to think that we belong to a noble profession, and I am sure that most of us have strived, some valiantly, some feebly, to play the part. We do belong to the greatest profession in the world, but there are a lot of doctors who take advantage of that fact, and live on its prestige instead of contributing to the advancement of it. Recently, and by recently I mean within the last five years, there have been constant slurs at the doctor, in newspapers, in public meetings, and in individual conversations. Why is this? The answer is not far to seek. There has been a smear campaign, against the doctor, conducted from Washington, *at our expense*, in an effort to belittle him, to humiliate him, to browbeat him, to make him appear mercenary, and in every way to decrease the public regard for him. Again I ask what is the reason for this, and again I say that the answer is not far to seek. If the people of this country can be gotten to think that the doctor is a *bad person*, there is more chance of passing the bill for National Compulsory Health Insurance, which everyone knows, who has studied the situation and the history of such bills in other countries, would cause a marked deterioration in the quality of American medicine, which is the best medicine in the world, in spite of the fact that certain people, with insufficient information, claim that certain small countries have better medicine than we have. I could go into this in great detail but there is not time for it. I would like to ask you, however, why the Swedes live longer in Minnesota than they do in Sweden, and why the Norwegians live longer in North Dakota than they do in Norway?

Now why are these Washington bureaucrats so

anxious to get the bill for National Compulsory Health Insurance passed? The answer is again not far to seek. It is because the bill, if enacted into law, would provide for the expenditure of additional *untold billions* of dollars from the central authority of Washington, and that would give Washington still more power to centralize *all government* in one spot, and make every village and hamlet in this great land of ours dependent upon the central government for their very existence. Such a state would be a totalitarian state and every vestige of our democracy would be gone under it.

And what concrete plan shall we adopt? What is the simple duty of each one of us? Someone has said that the doctor must get into politics. It could be more *accurately* said that the doctor has been *thrust* into politics. I therefore urge each of you to organize *political action committees* in your own localities. You cannot do this as a medical society but you can do it as individuals. Every doctor should consider himself a *citizen* first of all. Your obligation as a citizen even supersedes your obligation as a physician. It follows then that it is incumbent on all of us to form groups for political action in order to save our country from destruction. One of the prime objects of such groups should be to see that *all physicians, and their families*, are not only registered to vote, but that they go to the polls and *vote* on election day. I believe it is the duty of *each physician* not to make appointments on election day, but to spend all the time he can (aside from emergencies) *on the telephone* checking to see whether people have voted, calling them and asking them to vote and *taking them to the polls* if necessary. In all of this work your wives can be of great help. They not only have more time, but are more willing workers. And right here I would like to pay a tribute to the magnificent work that the Ladies' Auxiliary, so recently organized, has already done.

Some may say that the doctor is *out of his sphere* in engaging in public affairs. Maybe so, but if so, then Dr. Warren was out of his sphere when he so valiantly led the American forces at Bunker Hill, and died in so doing. By getting out of his sphere and playing a role *far from his customary one*, he showed himself to be a great patriot and his name will be immortal as long as the flame that lights the candle of American liberty still burns. It is up to us to

keep that flame burning. *Talking* will not do it. Concerted *action* on the part of all of us is mandatory.

Some people ask me why I get so excited about socialized medicine. I am not excited about socialized medicine, in spite of the fact that I do abhor *every single form* of socialism. I am, however, excited about *my country*, and I deprecate the fact that we are allowing *unscrupulous planners* and *hopeless visionaries* to drag us down the primrose path of dalliance, when we should be *springing to arms* to fight the evil forces which are trying to destroy us. In this Second War of Independence in which we are now engaged, we need the fighting spirit of 1776. We need to be excited to the point that our *determination is so stiffened* as to give us *the will and the character* to preserve an independent and free America for our children, and our children's children, instead of allowing them to become *vassals* of a socialistic or communistic state. This will require *fighting continuously* and in the most unexpected places for some years to come. Let us take a leaf from the book of that first citizen of the world, Winston Churchill, who said "We shall fight on the beaches, we shall fight on the landing grounds, we shall fight in the fields and in the streets, we shall fight in the hills; we shall never surrender."

On a subsequent momentous occasion Churchill attended a moving church service on board the British battleship "Prince of Wales." Not many months afterwards that great ship was sunk by the Japanese. In writing of the occasion after the war, Winston said "It was a great hour to live. Nearly half of those who sang were soon to die." If we do not fight to preserve our liberties and to insure ourselves better government, we *deserve* to be vanquished. *Sitting idly by and talking about it will not help*. Only unselfish work on the part of *all of us* will insure us the preservation of our liberties.

Some of the most distinguished members of our Medical Society have criticized the methods of some of us as being undignified. This criticism has been especially directed at the production of the comic booklet satirizing socialized medicine. I shall not contest the point. If we were completely dignified, we would entirely ignore the base and unjust attacks being made on our profession by certain agencies in Washington. We would sit by in stony silence and

some day wake up to find that we were all faced with the choice of becoming government employees or giving up our profession. We have got to fight the devil with fire. The devil I refer to is not the traditional specter with horns and a forked tail, but is personified by certain malign influences, from which emanate the most noxious and nauseous vapors that ever offended the nostrils of a free and independent people. If we want to remain free and independent, we will have to use every means at our disposal. Remember that the voter who does not understand the customary dignity and aloofness of our profession is more easily swayed by comic strips than he is by logic. His cross on the ballot is just as effective as that of the most learned professor and profound scientist in the country, and he is more numerous. The people who will listen to logic and serious talks are already on our side. We want to get the people who have only mentality enough to read a comic strip. Their votes count just as much as ours.

To wage the fight successfully requires *character* of the type that Churchill exemplified all the time he was Britain's war-time Prime Minister. Horace Greeley once said: "Fame is a vapor, popularity an accident, riches take wings, those who cheer today will curse tomorrow, only one thing endures—Character." If we haven't already got it, we must develop the *character* to stand for great principles, and exhibit the *stamina* necessary to fight for the right implied in them, no matter how much against our own self-interest that fight might be.

In closing, let me quote the words of two great Americans. First, Woodrow Wilson: "The history of liberty is the history of limitations of government power, not the increase of it." The other is from Patrick Henry: "I have but one lamp by which my feet are guided, and that is the lamp of experience. I know of but one way of judging the future, and that is by the past." Let us follow Patrick Henry's advice, and take a look at the past. Let us look at England, to mention only one of the countries which has fallen for socialism, and then let us turn our faces *steadfastly* in the other direction.

And finally, in paraphrase of another quotation: May God give us the serenity to accept that which *cannot* be changed, the courage to change what *can* and *must* be changed, and the wisdom to know the difference between the one and the other.

NOTES ON PHYSICAL THERAPY¹

by

MARYLAND STATE BOARD OF PHYSICAL THERAPY EXAMINERS

The wise use of Physical Therapy will be a most valuable aid to the physicians of Maryland.

This is a brief review of Physical Therapy and a short bibliography.² The reference material will be available at the Library of the Medical and Chirurgical Faculty of Maryland, 1211 Cathedral Street, Baltimore, Maryland. A list of Physical Therapists licensed to practice in the State of Maryland may be obtained without charge from Mr. C. W. Gaines, 2411 North Charles Street, Baltimore 18, Maryland.

It is hoped that this article will be a step toward the development of intelligent teamwork between the Physical Therapist and the Physician.

Definition

Physical Therapy is defined in the Law of Maryland as the treatment of human injuries, diseases or disabilities by means of the healing properties of exercise, massage, ultraviolet rays, mechanical devices, heat, cold, air, light, water, and electricity; but not by means of Roentgen rays, radium, surgery or drugs; and a *Physical Therapist* is defined as *one who treats only patients diagnosed and referred by licensed medical doctors*. In a broader sense, physical therapy includes "therapeutic teaching" as well as the administration of physical treatment procedures, since patients and relatives may need to be instructed in muscle re-education technics, the use of prosthetic devices and other treatment procedures.

Practical Use of Physical Therapy

Ideally the doctor and physical therapist function as a team. If the doctor feels that physical therapy is indicated, he may send the patient to the physical

¹ Editor's Note: The State Board of Physical Therapy Examiners wishes to acquaint doctors with some of the basic features of Physical Therapy. It is hoped to stimulate interest toward a better understanding and use of Physical Therapy.

² Excerpts from "The Job of the Physical Therapist," published by the American Physical Therapy Association, are included in this material.

therapist with the diagnosis, including any additional information needed to understand the patient's condition, and a statement of the results he wishes to obtain. The doctor may specify what treatment is to be given or he may discuss the treatment plan with the physical therapist. *The Physician and the Physical Therapist should be free to discuss their patient problems with each other.* The physical therapist should report the patient's progress; and this progress report should include any unusual symptoms or adverse reaction or the failure of a patient to respond properly within a reasonable time.

Physical Therapy Records

A well qualified physical therapist will keep the following types of records:

- Medical diagnosis and prescription (by physician)
- Daily record of treatment given
- Progress report
- Postural examination chart (as indicated)
- Muscle test chart (as indicated)
- Joint range chart (as indicated)
- Electrical examination and diagnosis chart (as indicated)
- Resistance exercise record chart (as indicated)
- Therapeutic exercise chart (as indicated)
- Activities of daily living chart (eating, dressing, resting, etc.) as indicated

Some Indications for Physical Therapy

Although the majority of patients treated come from the orthopedic and neurological categories, patients from a wide variety of diagnostic groups may benefit from physical therapy. In a general hospital, for example, virtually every service may recommend physical therapy for some of its patients. A list of types of cases treated by a representative number of physical therapy departments follows. This list is to be regarded as typical rather than exhaustive.

- Amputations
- Arthritis
- Burns
- Cerebral disease and injury, such as cerebral palsy, cerebral vascular lesions
- Congenital deformities, such as club feet and torticollis
- Dislocations
- Fractures

- Joint and muscle disease and injury
- Obstetrical and gynecological conditions
- Peripheral nerve disease and injury
- Peripheral vascular conditions
- Postoperative surgical conditions
- Posture
- Psychiatric conditions, such as conversion hysteria
- Skin disease and injury
- Spinal cord disease and injury, such as poliomyelitis, multiple sclerosis, traumatic lesions

Treatment Modalities

- Thermotherapy or heat (diathermy, infra-red, hot packs, paraffin bath)
- Radiation or light (infra-red, ultraviolet)
- Hydrotherapy or water (whirlpool bath, contrast bath, Hubbard tub, needle spray, cold and hot packs)
- Electrotherapy (electrical stimulation, ion transfer, short and long wave diathermy)
- Massage (general, local, relaxing, stimulating)
- Therapeutic exercise (passive motion, active assistive motion, active motion, resisted motion; breathing, posture and gait training; muscle re-education; coordination and rhythm exercise; stretching; underwater exercise)
- Miscellaneous (bandaging, strapping, removal and reapplication of splints and casts as prescribed)

Diagnostic Testing

The kinds of diagnostic testing for which the physical therapist may be responsible include (1) voluntary muscle testing (muscle power), (2) electrical muscle testing, (3) joint measurements and (4) functional activity testing (such activities of daily living as eating and drinking, dressing and undressing).

The amount of diagnostic testing which the therapist is expected to do varies from center to center. In all instances where it is performed, it is carried out under the prescription and general supervision of the physician.

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 1025 Vermont Avenue, Washington 5, D. C.

ORGANIZATIONS

Complete source material and reviews of all recent publications pertaining to these areas may be secured from the following:

1. National Foundation for Infantile Paralysis
 120 Broadway, New York 5, N. Y.
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 11 So. LaSalle St., Chicago, Illinois
3. National Rehabilitation Association
 1025 Vermont Avenue, Washington 5, D. C.
4. United Cerebral Palsy Association
 50 W. 57th Street, New York, N. Y.
5. National Multiple Sclerosis Society
 270 Park Avenue, New York 17, N. Y.

"De-VOTE A Day to Democracy. VOTE November 4th!"

Reports

THE AMERICAN MEDICAL EDUCATION FOUNDATION

NEWLAND E. DAY, M.D.*

WHY YOUR NAME SHOULD BE HERE

In the fall of 1948, a group of University presidents under the leadership of General Eisenhower of Columbia, and President Conant of Harvard, began independently to explore the possibility of developing a campaign on a national scale to meet the degree of financial crisis that has been facing the medical schools since the end of World War II, and to advance some suggestions for its cure. At the same time, a committee under the chairmanship of Mr. Earl Bunting, Managing Director of the National Association of Manufacturers started exploring the practicality of a campaign to be developed through the cooperative efforts of the medical profession, medical schools, business and industry. When the two groups learned of each other's activities, a conference was held and an agreement was reached quickly on combined efforts. At this meeting was born a National Fund for Medical Education.

From the beginning, the national fund considered itself a wholesale organization to raise funds for corporations and other large organized groups. It was understood that the American Medical Association would have to assume the responsibility for raising funds for the Medical profession. *By late 1950, it appeared likely that the national fund would be in a position to make a public announcement in the spring of 1951 if a substantial sum could be provided by the medical profession by that time.*

In December, 1950, the Board of Trustees of the A. M. A. generously appropriated \$500,000 to start the ball rolling, and this was followed quickly by the organization of the American Medical Education Foundation, the initiation of a fund raising campaign among the members of the medical profession.

In July, 1951, the Foundation and the Fund com-

bined, were in a position to make the first stab at the medical schools. During the first year, only sufficient funds were raised for Class A and Class B grants (see previous article), totaling just over one-half million dollars, and were only less than half the size than hoped for. This year the Fund hopes to contribute at least \$4,000,000 annually in "A" and "B" grants and to have further sums available for Class "C" grants. Voluntary enterprise should be one of the originators of this splendid arrangement. It is of interest to note that one of the presidential candidates, Mr. Eisenhower, was one of the founders of this move to encourage voluntary enterprise in the project to keep medical schools free and independent.

Maryland contributors to the American Medical Education Foundation, January 1, 1952, to July 31, 1952, are as follows: February Contributors—Thurston R. Adams, Baltimore; Walter A. Baetjer, Baltimore; George E. Bennett, Baltimore; Stuart M. Christhilf, Jr., Annapolis; Jesse C. Coggins, Laurel; Archibald R. Cohen, Clear Springs; Mary R. S. Farber, Sparrows Point; Paul N. Friedman, Baltimore; Palmer H. Fletcher, Baltimore; David J. Gilmore, Salisbury; Albert E. Goldstein, Baltimore; Francis F. Greenwell, Leonardtown; Donald B. Grove, Cumberland; Rachel K. Gundry, Baltimore; Frank Y. Jagers, Jr., Chevy Chase; Nathan Janney, Baltimore; Bernard S. Kleiman, Baltimore; Erasmus H. Kroman, Baltimore; Charles B. Marek, Baltimore; Charles W. Maxson, Baltimore; Robert S. McCeney, Laurel; Randall M. McLaughlin, Pasadena; Henry C. A. Mead, Sykesville; Elmer P. Sauer, Mt. Wilson; Douglas H. Stone, Baltimore; Merrell L. Stout, Baltimore; Edward L. S. Vendel, Baltimore; Sullins G. Sullivan, Baltimore; Richard W. TeLinde, Baltimore; Walter D. Wise, Baltimore; Arthur O. Woody, La Plata; Israel S. Zinberg, Baltimore; Edwin D. Weinberg, Baltimore; March

* Chairman of the Committee to Cooperate with the American Medical Education Foundation, Medical and Chirurgical Faculty.

Contributors—William E. Gilmore, Baltimore; William Henry Kammer, Jr., Baltimore; Norman C. Shoemaker, Silver Spring; Francis J. Townsend, Jr., Ocean City; April Contributors—Harry F. Klinefelter, Jr., Baltimore; James Hall M. Knox, III, Baltimore; William D. Noble, Easton; Karl F. Mech,

Baltimore; May Contributors—Francis A. Ellis, Baltimore; Charles R. Foutz, Westminster; John E. Savage, Baltimore; Harvey B. Stone, Baltimore; June Contributor—Whitmer B. Firor, Baltimore; July Contributor—Robert B. Brown, Capt. MC, U. S. N., Bethesda.

EMERGENCY MEDICAL CALL SYSTEM FOR BALTIMORE CITY AND BALTIMORE COUNTY

PAUL E. CARLINER, M.D.*

In this era of uncertain economics and, at times, troubled public relations between physician and the public, it is imperative that organized medicine take steps to insure that proper medical care be provided at all times.

While the providing of medical care to private patients is primarily the responsibility of the physician in private practice, it is well within the province of organized medicine to see that machinery be set up to bring together in a private physician-patient relationship those persons who require emergency medical care and who either have not established a relationship with a physician or who for some reason cannot reach their physician in time of emergency.

Several years ago the State Medical Society and several of its component societies decided to set up committees on emergency medical care to prevent the recurrence of the tragic happenings reported in the press, of people dying without having been able to get a doctor to answer a call for emergency help.

The Baltimore City Medical Society in conjunction with the Baltimore County Medical Society set up a committee headed by Dr. Douglas Stone to explore the ways and means of establishing a roster of physicians willing to take emergency calls on a private physician-patient relationship.

Dr. Stone's committee set up a roster of physicians in Baltimore City and Baltimore County on a postal zone basis to handle such calls. These calls are handled through an emergency number, PL 1400,

by operators of the Physicians' Exchange which has cooperated fully in handling these calls without any charge to the Medical Society. This system is now in its fourth year of operation, and in the first four months of 1952 it dispatched physicians on 1440 emergency calls.

There is still a need for more physicians to be listed on the panel. By keeping a full roster the number of calls handled by any one physician is small.

It is proper to point out at this time that the need for an emergency call system would be slight if all physicians would assume their proper responsibility in keeping their phones covered on a 24 hour basis, so that even if the physicians were unable at any time to answer a call, a substitute would have been provided. This would prevent the picture of distraught families picking up the phone to call their family physician in an emergency and finding an unanswered phone. What follows then is a desperate period in which a family is suddenly faced with the realization that the physician upon whom they have depended for medical care is not available when needed. At times this means that several other physicians are routed out of bed by hysterical families searching wildly for medical care wherever they can get it.

While the Committee on Emergency Calls is attempting to handle emergencies when physicians are not immediately available, it can in no way take over the responsibility of physicians to their own patients.

* Chairman, Committee on Emergency Medical Call System of the Baltimore City Medical Society.

Component Medical Societies

ALLEGANY-GARRETT COUNTY MEDICAL SOCIETY

LESLIE E. DAUGHERTY, M.D.

Journal Representative

Dr. Ralph A. Reiter opened an office for the practice of pediatrics in Cumberland, August 11, 1952. Dr. Reiter completed his studies at the University of Maryland Medical School in 1946 and then entered the Navy. While in the Navy he interned for a year at the Long Beach, California, Naval Hospital and then was transferred overseas. He was stationed in the Palau islands for a year and then was sent to duty on Guam in the Marianas. While serving on Guam, he was awarded a letter of commendation from Admiral C. A. Pownall for his work during a measles epidemic. Following his discharge from the Navy, Dr. Reiter served as resident physician at Memorial Hospital here from April, 1949, to June, 1949. He then went to the Mayo Clinic, Rochester, Minnesota, on a three-year fellowship in pediatrics, completing his work there last month. Dr. Reiter is a member of the Olmstead, Fillmore and Dodge County (Minnesota) Medical Society, The Minnesota State Medical Society and the American Medical Association.

Dr. Harry M. Robinson, Professor of Dermatology at the University of Maryland, spoke before the Allegany-Garrett County Medical Society, on the evening of Friday, September 18th, in the Nurses' Auditorium, Memorial Hospital. Dr. Robinson's subject was "Allergy Contact Dermatitis," and was illustrated with lantern slides.

Dr. Samuel M. Jacobson, 50 Pershing Street, Cumberland, Maryland, has had a paper titled

"Jaundice" published in the July, 1952, West Virginia State Medical Journal.

Dr. C. C. Zimmermann, Cumberland, is in Europe and expects to have an audience with the Pope and while in Rome will visit Dr. John Idoni, non-practitioner in Rome, specializing in surgery. Dr. Idoni is a native of Cumberland.

Dr. F. A. G. Murray, Cumberland, is said to be the oldest living active practitioner in point of years in the state of Maryland. Dr. Murray graduated from the University of Maryland in 1897. (If this is not the case, let us hear from others.)

The Medical and Surgical Staff of Memorial Hospital was entertained by the Board of Governors at the cottage of Hon. William A. Gunter, former Senator and now President of the Board, on August 20, 1952. Food for this occasion was brought from the Eastern Shore.

ANNE ARUNDEL COUNTY MEDICAL SOCIETY

GEORGE C. BASIL, M.D.

Journal Representative

Progress is being made on the plans to start the new wing and ground is expected to be broken early this Fall, for the Anne Arundel General Hospital.

Mrs. Charlotte Rawlings, Mrs. Imelda Russell, and Mrs. Mary Crandall attended the annual Nurses Convention in Atlantic City in June.

Dr. John McMann Claffy expired suddenly at his home, July 26th, 1952. He had practiced for many years in Anne Arundel County, was a member of the staff of the Hospital, and coroner for Anne Arundel County for several years.

"Get-Out-The-Vote"

Meetings of the Baltimore City Medical Society and its Sections
All these meetings will be held at 1211 Cathedral Street unless otherwise stated

BALTIMORE CITY MEDICAL SOCIETY

SAMUEL McLANAHAN, M.D., *President* EDWARD F. COTTER, M.D., *Secretary*
J. ALBERT CHATARD, M.D., *Treasurer*

Friday, November 21, 1952, 8:30 p.m.

PANEL DISCUSSION: DIETS

George V. Mann, M.D., *Moderator*, Assistant Professor of Nutrition, Harvard University School of Public Health, Boston, Massachusetts

Cardiac Diets. E. Cowles Andrus, M.D.
Obesity. John Eager Howard, M.D.
Dermatology. R. C. V. Robinson, M.D.
Obstetrics. Nicholson J. Eastman, M.D.
Hypertension. George V. Mann, M.D.
Dietetics. Mrs. John H. Trescher

This is an unusual opportunity for all those who are interested in the various branches of diets to participate and ask questions in the discussion period which will follow the panel discussion.

SECTION ON DISEASES OF THE CHEST

MOSES S. SHILING, M.D., *Chairman* EDMUND G. BEACHAM, M.D., *Secretary*

Wednesday, November 5, 1952, 8:00 p.m.

Fungus Diseases. (Illustrated.) Chester W. Emmons, Ph.D., Principal Mycologist, U. S. Public Health Service, National Institute of Health, Bethesda, Maryland.
(By invitation.)

SURGICAL SECTION

E. RODERICK SHIPLEY, M.D., *Secretary*

The following officers were elected by the Surgical Section of the Baltimore City Medical Society at their meeting on May 23, 1952:

Daniel J. Pessagno, M.D., *Chairman*
Edgar F. Berman, M.D., *Vice Chairman*
E. Roderick Shipley, M.D., *Secretary-Treasurer*

The new chairman, Dr. Pessagno, has appointed a committee which will act as a grievance committee to whom members of the Surgical Section can take their problems and complaints that deal with the Blue Shield. It is hoped that any misunderstandings may be avoided in this manner. The committee is composed of:

Karl F. Mech, M.D., *Chairman*
Otto C. Brantigan, M.D.
William E. Gilmore, M.D.

The Surgical Section did not meet in October.

BALTIMORE COUNTY MEDICAL ASSOCIATION

DONALD L. SOMERVILLE, M.D.

Journal Representative

A recent meeting of the Baltimore County Medical Association was held at Ames Friendship Hall in Pikesville, where the members were guests of the Minister and the gracious ladies of the church, who prepared a delicious luncheon as always. General James P. S. Devereux, Congressman from the 2nd district, was the distinguished speaker of the afternoon, and his topic was one of intense interest; General Devereux is one of the medical profession's truest champions in its fight against the insinuation of socialism into our profession and into society in general. He gave a concise resume of H.R. 7800, a bill designed to change the Social Security laws, and which in part consists of what has been called "the opening wedge to socialized medicine." This seems an apt term, for, as General Devereux explained, the portion of the bill applicable to the medical profession directly would authorize the Social Security Administrator to decide who should examine disabled persons (as well as where and when they should be examined) to determine the extent of their disability, and thus to determine their eligibility for a waiver of premium toward eventual Social Security benefits. He explained that the bill was literally forced through the House of Representatives, but was slowed down in the Senate for further consideration and possible future changes, especially with regard to the aforementioned provision. The General enlightened the members further with an explanation of just what Socialism really is and what it can do: Socialism and Communism have the same goal, achieved through different means. That goal is to produce a nationwide complete dependence on the government, through power achieved by utilizing the existing type of government by infiltration of one type or another. The magic keyword of this achievement of power is "Reform." The assembled physicians certainly took away with them a clearer picture of this menace from one who has had an opportunity to observe it at work, all of which should aid them in communications which are to the point to their senators and congressmen.

Following General Devereux's presentation, sev-

eral pieces of business came before the group. First of these was a motion that the Association's delegates to the Medical and Chirurgical Faculty be instructed that it is the Association's desire to continue the Medical Care Program (seriously handicapped now by a cutback in funds of \$100,000) as it has been in the past, with prorating when funds are low. This decision was arrived at by a vote of the majority of members of the Association, all of whom were sent letters that were actually ballots on which they voted for the solution to the problem which they favored. The majority who replied favored the prorating idea. Many of the replies to this voting contained comments, and it was obvious from these that many physicians have been doing medical care work for years without billing the state at all. The motion was passed unanimously.

The final item of business was an address by Mr. William Wells, legal advisor to the Association. Mr. Wells discussed the pros and the few cons involved in incorporation of the Baltimore County Medical Association, and convinced everyone present that the group would profit legally and practically by becoming a Corporation. It was so moved and passed.

Dr. Samuel Scalia, Chairman of the Public Relations Committee, will be sent by the Association to Chicago in September to attend the A. M. A.'s first Institute of Public Relations. Dr. Scalia will undoubtedly return to us well-armed with suggestions from the national organization. We look forward to his report.

DORCHESTER COUNTY MEDICAL SOCIETY

WALTER B. JOHNSON, M.D.

Journal Representative

Dorchester County is the largest (in area) of the nine counties which make up the Eastern Shore. It is separated on the north from Talbot and Caroline Counties by the Choptank River, and on the south from Wicomico and Somerset Counties by the Nanticoke River. It is bounded by the Chesapeake Bay on the west and southwest. The eastern boundary is common with the State of Delaware. The 580 square miles of surface are generally flat and are cut by many rivers which empty into the Chesapeake Bay.

The population was just under 28,000 at the latest census, with 10,500 of this number in the City of Cambridge. The other almost two thirds of the county population is rural, with agriculture, oysters, crabs and fishing being the main occupations. About 25 per cent of the population is colored.

The doctors practicing in Dorchester County are distributed as follows:

administrative offices, record room, dining room, laboratory and x-ray rooms. One operating room is added and the operating room suite is improved and modernized. A cystoscopic room is added in conjunction with x-ray.

The old building has been rewired and a sprinkler system installed, large storage and drug rooms are provided.

DOCTOR	TOWN	POPULATION	SPECIALTY
Brown, Hugh	Cambridge	12,000	General Practice
Brown, Robert	East New Mkt.	800	General Practice
Bunker, A. E.	Cambridge	12,000	General Practice
Gunby, Walter E.	Cambridge	12,000	General Practice
Hanks, Wm. H.	Cambridge	12,000	Surgery-General
Harrison, Wm. C.	Hurlock	1,000	General Practice
Mace, John	Cambridge	12,000	Surgery-General
Maryanov, Lawrence	Cambridge	12,000	General Practice
Maryanov, Alfred R.	Cambridge	12,000	Radiology-General Practice
Meade, James	Cambridge	500	General Practice
Meekins, Gilbert	Cambridge	12,000	General Practice
Miller, Frederick	Cambridge	12,000	Eye, Ear, Nose & Throat
Steele, Guy	Cambridge	12,000	General Practice (Semi-Retired)
Thompson, James U.	Cambridge	12,000	General Practice
Wolff, E. H.	Cambridge	12,000	General Practice
West, G. Brooks	Cambridge	12,000	Ear, Nose & Throat
(Col.) Wilson, H.	Cambridge	12,000	General Practice
(Col.) Brady, S. E.	Cambridge	12,000	General Practice

FREDERICK COUNTY MEDICAL SOCIETY

JESSE S. FIFER, M.D.

Journal Representative

Frederick Memorial Hospital is now putting the finishing touches on its million dollar improvement program.

The former 125 bed, 24 bassinet capacity, is now 160 beds and 37 bassinets.

A new Gambrill wing to the south has been added, costing one hundred thousand dollars, containing the emergency rooms, central supply and autopsy room.

A new North wing has been added, the first floor, private rooms, the second floor, semi-private and ward accommodations, and the third floor, a new obstetrical sweep, with modern nursery, formula, labor and delivery rooms.

Remodeling of the old part of the hospital alters most every department, giving enlarged, modern,

A wing has been added to the nurses home, providing for 28 additional persons, modern well equipped laboratories and class rooms for the school of nursing.

Two new general practitioners have started their practice in Frederick recently. Dr. Rex R. Martin, single, whose home state is West Virginia, and received his degree in medicine from Johns Hopkins Medical School, June 1950, started practice July 1, 1952.

Dr. Ernest J. Dettborn, a native of Baltimore, received his degree in medicine June 1951 from the University of Maryland, School of Medicine. He has a wife, formerly Miss Helen Stoner, from this county, and 2 children. He started practice August 1, 1952.

The Frederick Memorial Hospital building program is completed. Our staff has been recently organized into departments, which includes: Medicine, Pediatrics, General Surgery, Urology, Otolaryngology, Ophthalmology, Obstetrics, Pathology, Roent-

genology. All these departments are headed by well trained men in their respective specialties.

Dr. Robert J. Furie started at The Frederick Memorial Hospital on August 1st, as full time pathologist. He is a native of Massachusetts and a graduate of Boston University Medical School and comes from Georgetown University Medical Center.

PRINCE GEORGE'S COUNTY MEDICAL SOCIETY

SAMUEL J. N. SUGAR, M.D.

Journal Representative

The Prince George's County Medical Society held its first Golf Tournament June 5, 1952. Trophies were awarded to Lloyd Hughes, low net; Fred Musser, low gross; and Al Roth, high gross. An excellent dinner and refreshments followed the afternoon's play.

A speakers' list is being drawn up to address various PTA groups when school reopens.

Dr. Ronald Fleischer has been appointed Chairman of the County Diabetes Detection Drive to be held in November.

Dr. Proctor Harvey of Georgetown University Medical School presented an interesting paper on 'Cardiac Auscultation' at the June meeting.

At the October meeting Mr. Theodore Wiprud will give a very interesting talk on Medical Economics.

A speakers' bureau has been set up to address Parent-Teachers Associations who desire medical talks on various subjects.

The annual Diabetes Detection Drive will be under the supervision of Dr. Ronald Fleischer.

Arrangements for the annual Medical Society Dinner and Dance are being completed and this event will be held in early November.

* * * * *

AMERICAN MEDICAL ASSOCIATION OFFERS AID TO DOCTORS DIS- CHARGED FROM MILITARY SERVICE

American Medical Association News Notes, Vol. 1, No. 5, August, 1952

A new program has been set up by the American Medical Association to acquaint physicians newly-discharged from the armed forces with existing opportunities in private practice, industry, hospitals and medical schools throughout the country. Inaugurated by the Council on National Emergency Medical Service, the plan incidentally will also provide replacements for physicians classified priority I under the "Doctor Draft Law" who are now deferred from active military service because of essentiality.

The Council will contact army, navy and air force physicians before they are discharged to find out if they have any post-service plans. If the doctor hasn't made any plans, he may indicate to the Council where he wants to locate and in what field of medicine he is interested. This information will be sent to state medical societies and to state medical advisory committees to the Selective Service System. Correspondence with individual physicians on these lists will be handled by either the state advisory committees or the medical societies.

* * * * *

ARMY ANNOUNCES PROGRAMS TO EASE SHORTAGE OF NURSES

A. M. A. Capitol Clinic, Vol. 3, No. 32

Army Medical Service is planning two steps in an attempt to ease the shortage of nurses. It will broaden its practical nurse training program this fall with two new 48-week courses in advanced medical-technical procedure, opening October 27th in Dallas and San Francisco. Army also plans a 3-month intensified campaign starting next February for recruitment in the Army Nurse Corps and Women's Specialist Corps. If the call for 500 nurses and 125 medical specialists can't be met by volunteers, Army will begin calling women from its organized and voluntary reserves. Meanwhile, Air Corps says it is getting enough nurses through volunteers and Navy reports an adequate supply of nurses through voluntary recruitment of reserves.

Library

JOHN FONERDEN, THE FIRST LIBRARIAN

Although little has been recorded about Dr. Fonerden in the brief biographical sketches, it is evident that he took an active interest in the affairs of the Faculty and contributed to a new way of thinking in his service of caring for the insane.

John Fonerden was born in Baltimore on January 22, 1804. He received his degree, Doctor of Medicine, from the University of Maryland in 1823, when he was only nineteen years old. He was the Attending Physician, Baltimore General Dispensary, 1826-28; President, Medico-Chirurgical Society, 1831; Orator, Medical and Chirurgical Faculty, 1833; Secretary, Medical and Chirurgical Faculty, 1828-34; Librarian of the Medical and Chirurgical Faculty, 1830-34; City Physician, 1832; Professor of Obstetrics and Diseases of Women and Children, Washington University, Baltimore, 1845-46; Medical Superintendent, Maryland Hospital for the Insane, 1846-69; Vice-President, Medical and Chirurgical Faculty, 1854-55.

In response to the resolution, made at the annual meeting of 1830 by Dr. Samuel Baker to appoint a Library Committee to purchase periodicals and other standard works in medicine for the use of the members of the Faculty, large donations of books were made by Faculty members. Among the first contributors was Dr. Fonerden, who had been appointed Librarian of the Medical and Chirurgical Faculty in 1830. It is interesting to note that the salary at this time was \$100 per annum.

"The existence of such a collection," said Dr. Fonerden, Chairman of the Library Committee, "as the catalogue of this library announces to be at the command of the members of the corporation throughout the State, is one of the results of the care with which the Faculty has endeavored to use its funds wisely for a permanent diffusion of medical and surgical knowledge."

In 1833 a small catalogue was printed, listing the holdings of the library. In 1834 the librarian was directed to have printed a supplement to this cata-

logue. It is probable that the famous 1835 catalogue was the result of this direction. This catalogue contains a list of 569 entries of books purchased and gifts received during the first five years. By 1840 additional entries made in writing increased the number of holdings to 979. This small catalogue of 1835 with the interleaved additions was the property of the Armed Forces Medical Library from the latter part of the nineteenth century until 1948, when it was graciously returned to our library.

Another phase of Dr. Fonerden's career was in his appointment as Superintendent to the Maryland Hospital for the Insane, now called the Spring Grove State Hospital, in 1849. He held this office for twenty-three years, or until his death.

Dr. Richard Sprigg Steuart, the President of the Board of Managers of the Maryland Hospital, wrote that Dr. Fonerden "had a calm, benevolent, yet determined expression of countenance that gave command to all around him and seldom had he to resort to other means than personal manner to control his subjects. Though his position was subordinate, the perfect harmony between his chief and himself, made but one mind in operation, and for twenty-two years he had the unlimited control of the Maryland Hospital, and the highest confidence of its Board of Visitors."

During Dr. Fonerden's service, the hospital passed through a trying period. The financial situation, resulting from the Civil War, made it almost impossible to collect payments from the counties for their patients. The existence of the hospital during the sixties was a precarious one.

From his reports, it is apparent that Dr. Fonerden had a keen appreciation of the needs of the insane and a clear understanding of the causes of mental disease and the measures necessary to prevent mental illness.

Dr. Fonerden was one of the Charter Trustees of the Johns Hopkins University and Hospital. Unfortunately, he did not live to see the realization of the plans that had been made for this institution, since Dr. Fonerden died in Boston at the Massachusetts General Hospital on May 6, 1869.

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THE DR. SAMUEL BAKER FUND

One hundred and twenty-two years ago, at the annual convention of the Medical and Chirurgical Faculty, the following resolution was offered by Dr. Samuel Baker of Baltimore: "Resolved, That a committee of five, to be called a Library Committee, be appointed to purchase such periodical and other standard works in medicine as they may deem proper, to be placed in some suitable situation for the use of the members of the Medical and Chirurgical Faculty of the State; and that this committee be authorized to draw on the Treasurer for an amount not exceeding \$500 for the purpose above-mentioned, and that this committee report at the next meeting of the convention. It is also made the duty of this committee to draw up such rules and regulations as may be necessary for the safe keeping and management of the library so procured. Committee: Samuel Baker, Peregrine Wroth, Wm. W. Handy, John Fonerden and H. W. Baxley." Dr. Baker continued to act as the chairman of this committee until his death.

Samuel Baker was born in Baltimore on October 31, 1785. His early education was received at the James Prestley's Academy in Baltimore. At the age of fifteen he was sent to Chestertown, Maryland, to complete his classical studies under Dr. Ferguson. He returned to Baltimore and entered the apothecary of Dr. Henry Wilkins to gain a practical knowledge of pharmacy. Later, he became a pupil of Dr. Miles Littlejohn and Dr. William Donaldson. In 1806 he entered the University of Pennsylvania. At this time Benjamin Rush, the father of American Medicine, was at the height of his medical career. His other teachers were Barton, Shibley, Wistar,

Woodhouse, Physick and Dorsey. After attending two courses of lectures, he received the degree of Doctor of Medicine and returned to his native city to practice.

He took an active part in the professional life of the city. Six months after he began his practice, he was elected Professor of *Materia Medica* in the College of Medicine of Maryland, which later became a part of the University of Maryland. From the moment of his entrance into the University, its history became identified with his labors, his talents and his zeal. He was a pioneer in the upbuilding of Baltimore as a medical center.

His career as a public professor terminated in 1833. It has been said that the successive unpleasant difficulties, which harassed the University at this time, made a disagreeable situation and the demands upon his time from his practice were such that it became necessary to retire from this position.

The records state that "the disease which proved fatal was so illusory that but little apprehension was felt for him until a day or two prior to his dissolution. He died at the ripe age of 50" on October 16, 1835.

He has left behind him a monument of his interest in and a devotion to science, which can never be forgotten. It was through his instrumentality and at his suggestion that the Library of the Medical and Chirurgical Faculty of Maryland was instituted.

In 1901, Dr. S. T. Earle, President of the Faculty, announced that by the will of the late Mrs. Ellen Baker, \$1,000 was bequeathed to the Faculty in memory of her father, Dr. Samuel Baker, to be used as a special fund, the interest of which is to be applied to the purchase of books relating to *materia medica* and therapeutics.

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The Faculty Bookplate is used and the Baker Fund is so designated.

Health Departments

MATERNITY CARE IN MARYLAND'S COUNTIES— THE ROLE OF THE STATE DEPARTMENT OF HEALTH

JOHN WHITRIDGE, JR., M.D.

BACKGROUND AND DEVELOPMENT

During the past two decades truly amazing progress has been made in safeguarding the lives of mothers and their newborn infants. For example, in 1951 the maternal mortality rate for the state of Maryland reached a record low of 0.5 per thousand live births, a notable achievement for which the medical and nursing professions of the state are to be heartily congratulated. It was, however, not always so. In a survey of maternal deaths for the three year period 1927-29 Dr. J. H. Mason Knox, Jr.¹ in his annual report to the Director of Health pointed out that the maternal mortality rate for the counties of Maryland for those years was 5.6 per thousand live births. In an analysis of 176 maternal deaths in women beyond the seventh month of pregnancy he found that only 8% had received adequate prenatal care, 56% *had received no prenatal care whatever*, and the remainder had received inadequate care. Dr. Knox concluded, "There is urgent need on the part of physicians and each community to provide at little or no expense, satisfactory prenatal and obstetrical care for women who are unable to provide this care for themselves."

As this picture of lack of adequate prenatal care came into focus Dr. Knox turned his efforts and the resources of the State Department of Health toward the organization of health department sponsored prenatal conferences. Under his guidance and with the philosophy expressed above the first such clinic was held in May of 1928 in Havre de Grace. The project was undertaken with the full cooperation of the local county health officer and with the approval of the local practicing physicians. In the subsequent twenty-four years the program has expanded slowly throughout the state, so that at present there are

62 clinic centers providing antepartum care to those in need of it in 22 of the 23 counties.

SERVICES RENDERED

In recent years approximately 2500 women annually have received their prenatal care in health department clinics. In the remainder of this brief description these patients will be referred to as clinic patients. They represent somewhat less than nine per cent of all pregnant women in the counties of the state, and eighty per cent of them are Negroes. As a group they are almost without exception indigent or medically indigent. All applying for clinic care receive a complete physical examination, urinalysis, x-ray of chest, and blood studies including serologic test for syphilis, Rh factor determination, and hemoglobin determination. When indicated, special diagnostic studies such as x-ray pelvimetry are carried out. The ultimate goal is to make available to clinic patients as modern and adequate antepartum care as possible. In addition patients receive advice concerning hygiene during pregnancy, dietary instruction, and assistance wherever possible with social and economic problems.

Except in a few areas where the State Department of Health has employed certified nurse-midwives, the Health Department does not itself undertake to furnish delivery care. Accordingly, helping the patient to make suitable plans for delivery is an extremely important function of clinic services. Since the vast majority of fatalities to mother or child will inevitably occur in those women with abnormalities, the meticulous search for all deviations from the normal becomes the very purpose and key-stone of the entire project. Over the years the importance of this screening process has led to the

establishment of close relationships between the Health Department and hospitals throughout the counties and in Baltimore City. This has been done in order to make available adequate delivery or other obstetrical care to those mothers with toxemia of pregnancy, contracted pelvis, hemorrhagic complications of pregnancy, and the like. The ability to make suitable plans for patients with abnormalities is thus the very cornerstone of the program.

MIDWIFE CONTROL

When examination reveals no abnormality and when the course of pregnancy has been uneventful no urgent need for hospital delivery exists. In such circumstances clinic patients are assisted in making plans for home delivery, rarely these days by a physician, usually by a licensed midwife. The State Department of Health is charged by law with the responsibility for licensing, inspecting, and supervising the activities of all midwives in the state. The law further states that a midwife may accept for delivery only those patients who have been examined by a physician and certified by him to be normal and thereby suitable for midwife care. Normal clinic patients allowed to have midwife delivery made up slightly over 40% of all midwife deliveries in the counties. The remainder are examined and cared for prenatally by practicing physicians. Accordingly, the private physician has a definite responsibility in this aspect of maternity care. Evidence that this responsibility is sometimes taken lightly is found in the fact that the death rate in those patients delivered by midwives who have not been screened in health department clinics is nearly four times that of those attending clinics. It can be stated with sincerity that in all instances where the private physician finds his load of patients to be delivered by midwives too time-consuming, the Department of Health stands ready to assume their care. In fact, it would seem that in this very group, mostly Negroes and from the lowest economic level, lies the most logical and greatest need for health department activities in the field of maternity care in this state.

PERSONNEL

Various categories of professional personnel assist in the program being described. Local practicing

physicians, both obstetricians and general practitioners, have through the years given generously of their time in support of the prenatal clinics by acting as clinic physicians. Without this support the results achieved would have been impossible. In all but a handful of the 62 clinic centers throughout the state local physicians are serving in this manner. The county health officer cooperates by acting as clinician in the absence of another physician, and in making available clinic space and nursing and secretarial services. In six counties certified nurse-midwives are employed to supervise the county maternity program, particularly to supervise midwife activities, and to instruct general duty public health nurses. The nurse-midwives also accept a few patients each year for home delivery.

Available from the central staff of the Health Department are three types of consultant services. The first of these is a maternity nurse consultant who is responsible for the nursing and midwife aspects of the program. As such, she takes an active part in the instruction of nurse-midwives, general duty public health nurses, and especially midwives. For the latter she is responsible for arranging classes of instruction, supervision at delivery, examinations for licenses, and periodic inspection. Secondly, expert dietary advice is available from nutritionists from the central office. They furnish both direct service to patients in clinics and also instruction in nutrition to the general duty nurses. Thirdly, there is an obstetrician employed on a full-time basis by the Health Department. His activities include pre-arranged trips to most of the counties of the state to hold consultation clinics. In these clinics abnormal or suspect cases are examined and help is given in making arrangements for suitable delivery or other obstetrical care. The obstetrical consultation clinics are not limited to health department patients, in fact, physicians are welcome at any time to refer their own private patients. If more convenient to patient or physician, private patients may be seen in the physician's office, the local hospital, or the patient's home.

Last but by no means least on the list of those helping with the maternity program is the general duty public health nurse. Without her, little could be accomplished. She knows the family, is usually the first one to whom the patient turns for help,

makes home visits for a variety of purposes including preparation for home delivery, and is in general the direct source of contact with the patient.

RESULTS

In a recently completed survey² of health department clinic maternity patients over a six year period the following statistical results were ascertained: In 11,052 delivered clinic patients, 38% had been delivered in their homes by midwives. The trend toward hospital delivery for clinic patients, either electively or because of pathology, has increased steadily, reaching 60% in 1950. A comparison between clinic patients and others in the counties of the state revealed practically identical mortality rates for white patients. In Negro patients, however, neonatal, fetal, and maternal mortality rates were all approximately one third lower for those patients who had attended a clinic than for those who had not. These data were interpreted to indicate that there is a continuing need for free clinic services in Maryland for the underprivileged. A majority of present-day fatalities to either mother or child is

still occurring in women whose antepartum care has been nil or inadequate. Additional evidence that, despite the amazingly low maternal mortality rate, much still needs to be done is found in the reports of the Committee on Maternal and Child Welfare of the Medical and Chirurgical Faculty. This committee, reviewing all maternal deaths each year, still finds consistently that two of every three deaths could have been prevented by adequate care and patient-cooperation. Dr. Knox's conclusions in 1929, amended by changing one word, would read as follows: "There is *continuing* need on the part of physicians and each community to provide at little or no expense, satisfactory prenatal and obstetrical care for women who are unable to provide this care for themselves."

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2. WHITRIDGE, J. JR. AND DAVENS, E., Am. J. Public Health **42**, p. 508

* * * * *

Not the Farm Vote . . .
The Big-City Vote . . .
The Labor Vote
Or any Party Vote . . .

THE FAMILY VOTE

Will elect the Next President

Politicians talk a lot about this and that "bloc" of voters being decisive factors in this election. So do all the pollsters. You can't blame them for trying to dope it out that way in advance . . . but . . .

YOU know you're going to vote your own sweet way when you get behind that voting booth curtain—that where you live or work hasn't got a blankety-bloc thing to do with how you'll vote. You'll vote for what you believe to be in the best interests of your family—your kids—and your kid's kids.

So YOU know that this year—as always—it will be the FAMILY vote that really decides things. And families are working as never before to make sure every American votes. Right now in millions of American families, everyone from Little Sis to Grandma is pitching in to remind every eligible American to register to make sure of the opportunity to vote. And then they'll tackle the job of getting out the vote of every member of America's 44,000,000 families. They're the biggest "bloc" in America—they ARE America!

If your family is already working at the job—congratulations! If you aren't, talk it over at supper tonight, and pitch in tomorrow.

YOUR DOUBLE DUTY . . .

Vote Yourself and Help Your Neighbor Vote!

STATE OF MARYLAND DEPARTMENT OF HEALTH
MONTHLY COMMUNICABLE DISEASE REPORT

Case Reports Received during 4-week Period, August 29-September 25, 1952

	CHICKENPOX	DIPHTHERIA	GERMAN MEASLES	HEPATITIS, INFECT.	MEASLES	MENINGITIS, MENINGOCOCCAL	MUMPS	POLIO MYELITIS, PARALYTIC	ROCKY MT. SPOTTED FEVER	STREP. SORE THROAT INCL. SCARLET FEVER	TYPHOID FEVER	UNDULANT FEVER	WHOOPING COUGH	TUBERCULOSIS, RESPIRATORY	SYPHILIS, PRIMARY AND SECONDARY	GONORRHEA	OTHER DISEASES	DEATHS Influenza and pneumonia
Total, 4 weeks																		
Local areas																		
Baltimore County.....	2	—	2	1	2	—	2	9	—	2	—	—	—	17	—	6	—	5
Anne Arundel.....	—	—	—	—	—	—	—	1	—	1	—	—	3	13	1	6	—	1
Howard.....	—	—	—	2	—	—	—	—	—	—	—	—	—	1	—	2	—	—
Harford.....	—	—	1	3	—	—	1	5	—	—	—	—	2	7	1	4	m-6	2
Carroll.....	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—
Frederick.....	—	—	—	—	—	1	1	6	—	4	—	—	—	3	—	—	m-1	—
Washington.....	—	—	—	—	—	—	—	4	—	—	—	—	—	1	—	2	m-1	3
Allegany.....	—	—	—	—	—	—	—	—	—	1	—	—	1	2	—	—	—	—
Garrett.....	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2
Montgomery.....	—	—	—	—	—	—	1	5	—	1	—	—	—	22	—	—	—	2
Pr. George's.....	—	—	1	—	3	—	1	3	—	—	—	—	—	14	—	—	—	1
Calvert.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Charles.....	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Saint Mary's.....	—	—	—	8	—	—	—	—	—	—	—	—	—	—	—	4	—	—
Cecil.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Kent.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—
Queen Anne's.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Caroline.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—
Talbot.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	—
Dorchester.....	—	—	—	1	—	—	—	—	—	1	—	—	—	3	—	—	—	—
Wicomico.....	—	—	—	—	—	—	—	1	—	—	—	—	—	4	1	12	—	—
Worcester.....	—	—	—	—	—	—	1	3	—	—	—	—	—	—	1	—	—	—
Somerset.....	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
Total Counties.....	2	0	4	15	5	1	7	37	0	10	0	1	6	92	5	44	—	18
Baltimore City.....	4	0	4	5	3	2	22	11	0	7	0	0	7	98	20	691	e-2	13
State																		
Aug. 29-Sept. 25, 1952.....	6	0	8	20	8	3	29	48	0	17	0	1	13	190	25	735	—	31
Same period 1951.....	36	2	7	9	114	0	29	16	4	20	6	2	14	242	16	706	—	12
5-year median.....	15	8	4	—	21	4	31	37	7	23	4	2	108	195	76	697	—	33
Cumulative totals																		
State																		
Year 1952 to date.....	2737	7	833	182	9066	71	915	101	29	838	15	13	165	2079	150	5583	—	508
Same period 1951.....	2707	33	844	186	5385	44	3579	48	39	728	16	23	354	2048	248	5479	—	378
5-year median.....	3041	154	384	—	2910	96	1206	95	54	885	26	33	1010	2113	996	5685	—	515

e = acute encephalitis.

m = malaria; all were contracted outside the U. S. A.

Paralytic poliomyelitis in Maryland seemed to reach its peak this year during the third week of September. More than twice as many cases have occurred to-date as in 1951. Three fourths of these have been in the Counties of Maryland.

In 1950, an epidemic year, there were 256 cases received by September 25th as compared with 101 cases in 1952 for the same period.

BLUE CROSS AND BLUE SHIELD

A PROGRESS REPORT

REGINALD H. DABNEY*

Both Blue Cross and Blue Shield Plans continued to show steady growth in the first six months of 1952, in enrollment, as well as in payments for hospital and medical care which is the real measure of service to the subscribing public. Here are some highlights which should be of interest:—

BLUE CROSS

Membership as of June 30 stood at 857,000 as compared with 842,000 at the beginning of 1952. The rate of increase is slower as the Plan grows larger, but it still continues a steady upward trend.

Much more impressive are the figures on payments for hospital care—\$5,157,900 during the first six months of 1952 as compared with \$3,859,000 in the same period a year ago. This is an increase of 34 per cent, resulting primarily from the increase in hospital costs, and to a lesser extent from increased utilization by subscribers. The average payment for each in-patient case (excluding maternity) has gone up from \$96 to \$133.

BLUE CROSS PATIENTS AND PAYMENTS (First Six Months of 1952)

Subscribers Hospitalized.....	56,426
Total Patient Days.....	328,160
Average Payment per In-Patient Case.....	\$133
Total Payments for All Care.....	\$5,157,900

Subscribers receiving hospital care in the first half of 1952 totalled 56,326, an increase of about 10 per cent over the same period in 1951, and they used (excluding out-patients) 328,160 days of care. Expressed another way, 12 subscribers out of every 100 went to the hospital in the first six months of

this year, while in 1951 only 10 out of every 100 were hospitalized. This increase in utilization—an extension of a basic upward trend since 1946—is cause for serious concern. The average length of stay for the period was 7.6 days, unchanged from a year ago.

BLUE SHIELD

Membership in Blue Shield on June 30 was 172,200, of whom 69,200 were enrolled under our own program and 103,000 under the special contract for Bethlehem Steel employees which was effective September 1, 1951; a year ago there were 46,080 subscribers. Here are the highlights of our own Blue Shield program:—

During the first half of the year 4,338 subscribers received benefits—2,873 of them for surgery, 1,440 for medical care and 339 for obstetrics. In the same period a year ago benefits were provided to a total of only 1,574—about 50 per cent less.

The average payment per case for the first six months came to \$71; the average was \$73 for surgical care, \$53 for medical and \$93 for obstetrics.

Full service benefits were received by 53 per cent of the subscribers whose incomes were under the established limits, while the remaining 47 per cent with higher incomes received benefits as a credit toward the physician's charge.

Payments to physicians in the period totalled \$307,100 as compared with \$104,900 in the first six months of 1951.

Including the special Bethlehem program, payments of \$560,000 were made to physicians on behalf of 5,165 subscribers during the current half year. This amount represented 85 per cent of the total paid in by subscribers under both programs.

* Executive Director, Maryland Hospital Service, Inc., and Maryland Medical Service, Inc.

Woman's Auxiliary to the Medical and Chirurgical Faculty

MRS. GEORGE H. YEAGER, *Auxiliary Editor*

PRESIDENT'S MESSAGE

Our Auxiliary is unique in that it is the only organization which is composed solely of the wives of physicians and which exists to assist the Medical and Chirurgical Faculty and to carry out its requests. We support the Faculty by distributing positive health information, by working for good Public Relations for the medical profession, and by helping in the doctor's campaign to preserve our American form of government, fighting socialized medicine. In other words, we are an educational, rather than a service organization.

Just as the Hospital Auxiliaries serve the hospitals and help them to better serve the public, so we endeavor to help the Medical and Chirurgical Faculty. Unlike the Hospital Auxiliaries and other civic groups, however, everyone of our members *must* be a doctor's wife and no other women may join the organization! Naturally, in our Auxiliary, there is always immediate support and understanding of the views of the profession. We learn from the Medical Society, itself, the legal measures which it feels necessary to the health of the community, when the public should be instructed on the needs of medical progress, and which legislation seeks to impose Government Medicine on the people! We not only *want* to help the Faculty to carry out its aims, but, under our Auxiliary Constitution we are required to. In working to assist the doctors we make firm friends among the wives of our husbands' colleagues. Surely every physician's wife will want to do her part in our state-wide and national effort.

As your representative at the June Convention of the Woman's Auxiliary to the American Medical Association, I described the Maryland Auxiliary's Public Relations work, through our Health Booths at State Fairs. The Auxiliaries of other states were favorably impressed and the Pennsylvania Auxiliary has subsequently printed a description of our work at the Timonium Fair of last year, in their Auxiliary Department of The Pennsylvania Medical Journal.

This year, at the request of the National Auxiliary, we are making movies of the setting up and running of our Health Booth at Timonium. The movie will be shown in Chicago at the November Conference, of the Woman's Auxiliary to the American Medical



Mrs. Charles Herman Williams, President
April, 1952 to April, 1953.

Association! As such a new member of the National Auxiliary, we are proud of making this contribution to the National Program.

As to program, we realize that our State Auxiliary Program, with its constant flow of letters regarding Civil Defense, Nurse Recruitment, Medical Research, Legislation, getting out the vote, etc., at times seems overwhelming. It may also be annoying to the Component Auxiliary, which has already done more work and knows more on a given subject than

the rest of the state! The thing to remember is that these are only suggestions. Our program is completely flexible and voluntary. Since we do sincerely believe in the American tradition we are a grass roots organization with no dictation from the top down. Many of the ideas sent to you originated in one of our County Auxiliaries, or in some other state and have been so successful that we felt that more people would like to know about them.

In our very small way, we help the Medical Society to carry out its high aims. These aims are the same now as they were when the Faculty was founded in 1799. They are to protect the health of the people against quackery and mistaken "health" fads and to establish and maintain the highest medical standards in both hospitals and schools of medicine. As you know, the A. M. A. and its member societies established standards of sanitation, public health, desirable pure food and drug requirements and policed their own ranks for charlatans. It eliminated the practice of anyone buying a "diploma" from mail order "Medical Colleges," many years before the government made any laws about such things. Today the Faculty is still leading the way, to constantly improve medical practice, teaching, medical care, and to better health conditions for the public. As a member of this Auxiliary you have the opportunity to help them in some of their efforts to do it.

AUXILIARY CONVENTION NOTES

MRS. CHARLES H. WILLIAMS, *President*

At the National Convention of the Woman's Auxiliary to the American Medical Association, held in Chicago in early June, it was emphasized that we are not a service group but an *educational* one, and "an auxiliary to one of the oldest scientific bodies in the world." Dr. Scatliffe called us "an arm of the A. M. A.," Dr. Furey, "an aid to the worthy cause of medicine." If this is not enough definition, did you know that Dr. Louis H. Bauer, President of the A. M. A., has described us as a "tie-in between doctors and their socio-economic problems." Mrs. Kice, Parliamentarian of our national body, describes our auxiliary work for the Future of America in and with all other organized groups as "working together in behalf of humanity." Our Health Educa-

tion Program which already includes such subjects as Medical Research, Narcotics Addiction, Nurse Recruitment, Safety Campaign, and Civil Defense should now include Mental Hygiene. Certain main goals were stressed. Inspiration and encouragement for our new Maryland Auxiliary of roughly three hundred members and with only seven counties organized can be found in the history of the National Auxiliary. National started in 1922 with twenty-eight members, a number which, in 1932, had increased to 14,000, and which by 1942 had become 27,000. Now, in 1952, it totals 60,000 members representing all forty-eight states with 13,000 counties organized.

"Today's Health"

The Massachusetts Auxiliary reported making six thousand dollars by selling "Today's Health" at the public price of three dollars with a profit of a dollar and a half per subscription to the Auxiliary. This double triumph of raising money while furthering our goal of health education was accomplished by putting every Auxiliary member in Massachusetts on the "Today's Health" Committee. All members of the Auxiliary saw to it that the magazine was sold to their own community beauty shop, train station, drug store, baker shop, and as Christmas gifts. Members placed copies which they had purchased at the reduced dollar and a half yearly rate in their local drug store and newsstands in railroad stations, etc., and which were sold at the regular monthly rate to the public, through the voluntary cooperation of their friendly druggist or other dealer. The Auxiliary Legislation Committee sent subscriptions of "Today's Health" to their Congressmen in Washington because of its positive health information and its sympathetic articles concerning the physician. The American Medical Association this year has asked every Auxiliary to make "Today's Health" "No. 1" on its program because it establishes a needed liaison between the doctor and the public!

Funds

The California Auxiliary, which is twenty-eight years old, receives \$5,000.00 annually from the California Medical Society. In Tennessee the Medical Society dues automatically cover Auxiliary membership for each doctor's wife and in addition the Tennessee Medical Society donates fifty cents per mem-

ber to the Auxiliary for its Public Relations and Educational work. May such a day dawn for us, too!

Nurse Recruitment

The number two request to the Auxiliary from the A. M. A. is Nurse Recruitment with emphasis not just on Nursing Scholarships, but also on keeping the nurses whom we have. Suggestions to Nurse Recruitment Committees were to furnish a list graph of all available Nursing Scholarships from any sources whatsoever to Vocational Counselors in schools and to meet the unrest in our young people by counseling them into the Nursing profession, not so much for financial rewards as for satisfaction of human service which are "not taxable," and which are enhanced by working in one's own community. Perhaps the greatest need right now is for Licensed Practical Nursing to furnish bedside care, as well as the three year and the college courses. Since professional recruiters go into high schools from other organizations the Auxiliary should investigate to avoid overlapping, try to reach obscure country or private schools which are *not* covered routinely. Perhaps the Auxiliary can coordinate some of their efforts and help to avoid having any schools receive *separate nursing* appeals from each local hospital. Future Nurses' Clubs can help girls take pride in a high calling, and don't forget that the best "recruiter" is someone whom the student knows! It is the responsibility of a School of Nursing to satisfy the student, first, with an excellent faculty and, secondly, with recreational facilities. The A. M. A. hopes that the Auxiliary will interest themselves in the *improvement of the nursing schools*, since 50 per cent of the students in some states fail their State Board Examinations apparently due to inferior preparation! Application forms for information on nursing schools should be sent to high school principals. "Nurse Recruitment Week" will bring in applications! In California, two doctors, as individuals, contributed \$29,000.00 towards Auxiliary Nursing Scholarships and in Nevada, the Auxiliary netted \$26,000.00 for scholarships by holding a rummage sale.

General Program Helps

The Auxiliary Membership Committee should see that every doctor's wife who is not a member, is

personally contacted and invited to join. In this way Texas acquired two hundred and sixty-two new members last year. It was emphasized that it is even more important to keep old members, really, than it is to make new ones. Therefore, Auxiliary Treasurers should send follow-up letters on all delinquent dues, knowing that many people intend to pay them and simply procrastinate. Old members should always be called and signed up again.

The Archives should be kept active with pictures, biographies and a few well chosen articles bearing on our work.

The A. M. A. feels that Civil Defense is in "bad shape" at present. We are asked to interest lay people in checking their emergency medical supplies, to see that other women as well as our own members are trained in First Aid and participate in Nurse Recruitment.

All President-Elects are urged to "line up" their Chairmen and Officers ahead of time so that they can take over immediately and effectively upon election.

Legislation Committees were urged to visit and really know their Senators and Congressmen, who also can be placed on Auxiliary programs occasionally.

"An ounce of prevention" is a slogan for County Fair Health Booths and for Safety campaigns. More children die by accident in this country than by disease. Use this in your publicity!

We were reminded that for over a hundred years the A. M. A. furnished all of its *services* to doctors without charge, as the "Journal" advertisements met expenses! Now however, it has become necessary to maintain three Washington representatives to convey the doctor's reaction to medical bills.

The Arkansas Auxiliary saw the first Negro woman doctor graduate in their state on money which they had raised four years ago! Another state Auxiliary greets all new citizens when they take their Oath of Allegiance, and other states emphasize the importance of having members join the P.T.A. and such organizations. Since this is election year, we were urged to have appropriate programs. The following is cited as an example program. One Auxiliary's members were notarized to go into hospitals to collect absentee ballots. They also put advertisements in the paper well in advance, to remind students and soldiers to write home for absentee ballots.

The Public Relations Department of the A. M. A. will write an answer to any article you find that is detrimental to medicine. Mail them the article and they will send you a reply based on fact.

A. M. A. Request to the Auxiliary

The A. M. A. asked the Auxiliary through a resolution, to tackle the problem of private support for the Nation's Medical Schools, which showed deficits of from eight hundred to eight hundred thousand dollars, per school, last year. The American Medical Education Foundation is the A. M. A.'s answer to this need and the Auxiliaries as well as the Medical Societies are asked to support it. The Medical Schools, obviously cannot continue to operate while "running in the red." The Federal Government has offered to subsidize the schools but the A. M. A. opposes this and feels that the government, if it pays the bills, could dictate policy and so control Medical Education.

The A. M. A. does not oppose state grants. The National Fund for Medical Education is a lay organization that collects funds from the Medical Profession as well as from lay persons and corporations. It allots money to the Medical Schools at the end of each year. Persons desiring to contribute to a certain school can so indicate on their check and the money will go to the designated school of medicine. A suggestion has been made that each doctor could give at least one dollar for each year that he has practised medicine. So far this year, only a quarter of the necessary money has been collected, with 42 per cent coming from the profession. The Fund collection year runs from January to January. The A. M. A. states that the Auxiliary's place is to "walk beside and to help however it can with the problem!"

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OPEN LETTER TO THE WOMAN'S AUXILIARY TO THE MEDICAL AND CHIRURGICAL FACULTY

Ladies:

As Chairman of the Maryland State Committee of the American Medical Education Foundation, I was greatly heartened to hear that the Woman's Auxiliary had been requested by the A. M. A. to lend both their moral and physical energies to the support of the Foundation.

The Foundation represents the physicians' (your husbands') opportunity to contribute to his medical

school in order to maintain it from the government control and domination that accompanies government subsidy.

While we will certainly welcome financial support from the Auxiliary, we will equally appreciate each individual wife's reminder to her husband of his responsibility in this annual campaign.

It is unique that there are no "strings" to this money, since it is privately given. Government grants, must be spent for specific projects, in spite of the fact that medical progress may indicate a different direction for its best use. There is no money wasted raising this money either, and every dollar you give goes directly to the Medical Schools, because the A. M. A. absorbs all of the secretarial expenses, etc. This is the first time that doctors have been asked to support a campaign of their "own," one so intimately associated with their interests, backgrounds and with the future of the profession, the needs of which are closer and more apparent to them than any layman.

Laymen are supporting the American Medical Education Foundation just as generously as doctors have always supported Religious, Educational and Civic drives. As most doctors realize, their own medical educations were not really paid for entirely by tuition fees, since medical schools have leaned heavily on endowments now taxed out of existence by government. This is a real case of "pulling ourselves up by our boot straps."

Any support which the Auxiliary member can give and also influence her husband to give will be a great help and, of course, the formation of whatever Committees are deemed necessary by the Auxiliary itself, will all assist our common cause. Our State Committee for the American Medical Education Foundation looks forward to happy and productive teamwork on our program with your Auxiliary!

With best wishes, I am

Sincerely,

NEWLAND E. DAY, M.D., Chairman
State Committee to Cooperate with
American Medical Education Foundation

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AUXILIARY NEWS

Mrs. Charles H. Williams, President has announced the following appointments as State Auxiliary Chairmen:

Special Committees, Mrs. R. Walter Graham, Jr.,

Medical Research; Mrs. Edwin H. Stewart, Jr., Co-Chairman; Mrs. E. Irving Baumgartner, Civil Defense; Mrs. Hammond J. Dugan, American Education; Mrs. Martin E. Strobel, Narcotics Addiction; Mrs. W. Kenneth Mansfield, Nurse Recruitment; Mrs. Beverley C. Compton, Creative Arts Show; Mrs. S. Jack Sugar, Membership; Mrs. George E. Urban, Convention Arrangements; Mrs. George H. Yeager, Auxiliary Editor; Mrs. J. Carlton Wich, American Medical Education Foundation.

Standing Committees, Mrs. E. Ellsworth Cook, "Today's Health"; Mrs. H. Hanford Hopkins, Legislation; Mrs. Thomas A. Christensen, Organization; Mrs. John G. Ball, Public Relations; Mrs. A. S. Chalfant, Program; Mrs. Elliott E. Flick, Finance; Mrs. Harry Davies, Historian; Mrs. Amos R. Koontz, Revisions and Resolutions; Mrs. Gerald W. Le Van, Doctor's Day; Mrs. George H. Yeager, Press and Publicity; Mrs. Omar D. Sprecher, Jr., Bulletin; Mrs. James T. Marsh, Members-At-Large.

We are very proud to state that at least five Auxiliaries manned Health Booths at County Fairs this summer and used the exhibits prepared for us by The Maryland Society for Medical Research.

Mrs. George H. Yeager has been made National Public Relations Chairman for the Eastern Regional by the Woman's Auxiliary to the American Medical Association.

THE TIMONIUM FAIR HEALTH BOOTH—1952

This year, the Health Booth at the Timonium Fair was really the joint project of the Auxiliary to the Baltimore County Medical Association, The Baltimore County Medical Association, itself, and the Baltimore City Auxiliary, with assistance from the Medical and Chirurgical Faculty and the State Auxiliary. The Baltimore County Medical Association felt that the Health Booth in the past had been a valuable aid in public relations and therefore made sure of its 1952 success by financial assistance towards expenses, by advice, and by the donation of time and hard work. The Society was able to solve problems which had baffled the Auxiliary. Cooperation with other organizations interested in health, such as the Maryland Society for Medical Research, The National Guard, the School of Nursing of the University of Maryland, the Baltimore County Fire Department and even with individuals who volun-

teered their services, made the Booth a real community effort and a *living example* of good Public Relations for the medical profession.

Our State Auxiliary President, Mrs. Charles H. Williams, gave a tremendous amount of time and effort towards the setting up and running of the Booth as did Dr. Williams, who is President of the Baltimore County Medical Association. (Our "Famous Family!") Mrs. Martin Strobel, President of the Baltimore County Auxiliary, appointed Mrs. D. Delmas Caples to secure members to man the Booth at night, while Mrs. Albert E. Goldstein, President of the Baltimore City Auxiliary, appointed Mrs. H. Melvin Radman to organize members for the day time hours of the eleven day Fair.

The front of the Booth was made attractive by the electrical question and answer exhibit of the Maryland Society for Medical Research and by the foot high dolls in Nurse's uniforms, a "graduate" and a "student," which were supplied by the School of Nursing, the University of Maryland. Real nurses, from the same School, gave free blood pressure readings to the public. Groups of teen-age girls clustered about eyeing the uniformed dolls, admiring the pretty nurses and reading Nurse Recruitment literature. Medical Research literature was also distributed along with A. M. A. pamphlets such as "A Doctor For You" and "Your Money's Worth in Health."

Free educational movies were shown in a tent behind the Booth and including "Frontiers In Medical Research" and a very popular animated cartoon on the same subject called "Man's Greatest Friend," another cartoon on diet called "Winning to Lose," one called "Catching a Cold," a heart film, and the "hit of the show," an animated picture exposing the evils of socialism called "The Foxes Will Get You If You Don't Watch Out." This last one came from the Metropolitan Life Insurance Company, whereas most of the films of ten minute average duration, came through the Woman's Auxiliary to the A. M. A., 535 North Dearborn Street, Chicago 10, Illinois. The short, amusing films were the most popular and two movie projectors and operators were employed simultaneously so that one reel of film could instantly follow another and one film could be rewound while the other one was being used.

The Health Booth this year was not only a wonderful success but the heart warming cooperation of the Medical Societies with the Auxiliaries and of

both with other health organizations, civic groups, and individual citizens demonstrates the best relations as existing both within and without our ranks and a most happy health achievement for all of the community.

AUXILIARY NEWS

Mrs. Joseph Carlton Wich has been appointed State Auxiliary Chairman for the American Medical Education Foundation. Our representatives, or liaison with the Woman's Auxiliary to the Southern Medical Association are Mrs. Frederick A. Holden and Mrs. Thomas A. Christensen, Past President of this Auxiliary. Three Resolutions derived from Maryland were passed by our National Auxiliary at the June Convention—one on Americanism, one on Safety, and one on keeping Auxiliary Membership lists private. Other National Resolutions favored

Voluntary Health Insurance Programs, more leaflets on A. M. A. Services, continuance of Civil Defense Programs, continuance of Blood Donor Programs, encouragement of members to run for legislature, School Board, and other government positions, sponsorship of the Program of the National Association for Practical Nurse Education, the registration and vote getting campaign for medical families, sponsorship of Urban and Rural Health Days and the sponsorship of good medical research legislation.

CIVIL DEFENSE WARNING

It was learned at the June Convention that Civil Defense must have more doctors or it cannot function! Has your husband offered his services? The A. M. A. warns us that the alternative to Civil Defense is Martial Law!



DOCTOR, TAKE THIS HOME TO YOUR WIFE!

SUPPORT OUR MEDICAL SCHOOLS! HELP US TO FOUND A NURSING SCHOLARSHIP!

Join us at the Benefit Dessert Bridge Fashion Show, a very complete showing of new fashions by Hutzler Brothers, on Wednesday, November twelfth, at one o'clock, in the Medical and Chirurgical Faculty Building. Tickets are \$1.25. Call Mrs. E. Ellsworth Cook, at BELmont 7887 for tables.

WOMAN'S AUXILIARY TO THE BALTIMORE CITY MEDICAL SOCIETY

SILVER SERVICE NEEDED

The Woman's Auxiliary would very much appreciate the donation of a silver service for use at buffet luncheons and teas at the Medical and Chirurgical Faculty Building. Two services really are needed and the suggestion has been made that they might be given, possibly as a memorial. The doctors could make use of them also. Sandwich trays, bon-bon dishes, flower bowls and candelabra would be a most welcome addition. Have you inherited any silver of this type which you do not need?

Ancillary News

DENTAL SECTION

BALTIMORE CITY HEALTH SOCIETY

A. BERNARD ESKOW, D.D.S.

Journal Representative

Despite the fact that the summer season finds no regular meetings for the dental society, the various committees nevertheless are busily engaged in preparing for the 1952-53 schedule. The monthly scientific meetings committee, under the direction of Dr. K. V. Randolph, are arranging for the usual monthly scientific sessions. The All-Day Meeting Committee, under the direction of Dr. Leon Seligman, is in the process of contacting the necessary clinicians for this session in February.

The Baltimore City Dental Society, during the summer months, joined the other civic groups and under the direction of our President, Dr. Arthur S. Wheeler and the President of the Maryland State Dental Association, appointed Dr. J. Ben Robinson chairman of a committee to aid the Mental Hygiene Society in their current drive. The dental society, taking full cognizance of its responsibility as a member of the allied health professions, contacted each and every member with both a plea as well as an explanation of both their civic and professional responsibilities to this cause.

The semi-annual state meeting at which the Baltimore City Dental Society was the host, was held from Sunday to Tuesday, September 21st-23rd, at the Lord Baltimore Hotel and proved to be a tremendous success. The affair consisted of a reception and cocktail party on Sunday evening and on Monday morning the scientific session was held and instead of the usual pattern of two scientific papers being read, the entire morning was devoted to a panel discussion on "Your Problems in Dentistry"

and was discussed by the following clinicians with Dr. E. D. Lyon of Baltimore, acting as moderator: Dr. E. B. Nuttall, University of Maryland Dental School, Baltimore, Maryland; I. r. Muller DeVan, Philadelphia, Pennsylvania; Dr. Gustav Kruger, Washington, D. C.; Dr. Carlos Weil, Drexel Hill, Pennsylvania. The scientific panel was arranged by the chairman of the scientific sessions for the meeting, Dr. Irving Abramson and his committee. The evening was a dinner-dance under the arrangement of Dr. Leon Seligman, chairman of the social committee. The wives of the members were entertained at an afternoon luncheon and fashion show at the Sheraton-Belvedere Hotel, under the guidance of Mesdames B. Ralph Hoffman, A. S. Wheeler, H. Van Natta, co-chairmen. On Tuesday the members engaged in varied outdoor activities such as golf at Rolling Road Country Club under the direction of Dr. A. Lazarus, chairman of the golf committee, and fishing from Annapolis under the guidance of Dr. L. Smyth, chairman of the fishing committee. This meeting was arranged by the Semiannual Meeting Committee, of which Dr. A. Bernard Eskow is the Chairman.

And finally, as we go to press, as is true with all other organizations, the full scientific sessions are getting under way with the regular monthly meetings.

From all indications, having discussed the coming season with the chairmen of the various committees, this season, under the presidency of Dr. Arthur S. Wheeler, promises to be a most stimulating and favorable one.

At this time a great many of the members are making plans to attend the annual meeting of the American Dental Association, which this year comes in the very early part of September and is being held in St. Louis.

"Vote As You Please—But Please Vote November 4th."

NURSING SECTION

M. RUTH MOUBRAY, R.N., *Administrator*

Steering Committee, Joint Board of Directors of the Three Maryland State Nursing Organizations

MARYLAND PUBLIC HEALTH NURSE WINS ROBERTS FELLOWSHIP

The Fellowship Award Committee of the American Journal of Nursing Company has announced the selection of Anne Rice, R.N., Supervisor of Public Health Nurses of the Baltimore County Health Department as the winner of the 1952 Mary M. Roberts Fellowship Award.

The Fellowship, one of the most coveted prizes open to professional nurses, was established in honor of Miss Mary M. Roberts, distinguished editor emeritus of the American Journal of Nursing, in recognition of her invaluable contributions to the nursing profession over the past half century. Purpose of the fellowship is to assist qualified nurses to acquire and develop writing skills so that they can better interpret nursing to nurses, prospective nurses and the general public in both professional and lay publications, a cause for which Miss Roberts labored for so many years.

Competitors for the award are judged on their general professional qualifications, interest and facility in writing and an evaluation of a specially prepared manuscript on some phase of nursing. Miss Rice's winning manuscript was entitled "Geriatrics and I."

Born in Kentucky, Miss Rice holds a bachelor of arts degree from Western Kentucky State Teachers College and taught school in that state for seven years. She then attended the Washington University School of Nursing in St. Louis, Missouri and, after receiving her bachelor's degree from that institution, continued her studies at Columbia University where she was awarded her master's degree.

The winner of the 1952 Fellowship has been registered and practiced nursing in the states of Missouri, Kentucky, Tennessee, Ohio and Maryland. Presently employed as Supervisor of Public Health Nurses, Baltimore County Health Department, Towson, Maryland, Miss Rice was formerly Senior Staff Nurse of the Defiance County Health Department, Defiance, Ohio and, prior to that, a staff nurse with the

Oak Ridge Tennessee Department of Public Health.

Under the terms of the grant, the winner is awarded between \$3,000 and \$4,000 to defray the expense of a year's study in education and journalism at a recognized college or university. While she is free to select a school of her own choosing the proposed course of study requires approval of the committee and must include courses in writing. Miss Rice has announced she is arranging for a leave of absence from her position with the Baltimore County Health Department and will enroll this fall at Teachers College, Columbia University, New York.

NURSING SERVICE STAFFING FOR THE NEW VETERANS ADMINISTRATION HOSPITAL IN BALTIMORE

Whenever new Veterans Administration Hospitals are opened concern is usually felt locally about the effect the nursing service staffing of these hospitals will have upon the nursing staffs of other hospitals in the area. We have been informed by Miss Dorothy V. Wheeler, Director, Nursing Service, Veterans Administration, that the new Veterans Administration Hospital in Baltimore is tentatively scheduled for activation in October 1952. Miss Wheeler, recognizing the probability of local concern, has sent to the Maryland State Nurses Association a statement of general policy relative to plans for the nursing service staffing in this hospital. We believe the physicians of Maryland will be interested in this policy and we are glad to share with them the information which Miss Wheeler has sent us.

The following is an excerpt from Miss Wheeler's communication:

"We wish to emphasize that it is our policy to do everything possible to avoid depleting the staff of local hospitals by giving first consideration to requests for transfer from nurses already in our service, and by referring nurse applicants from various parts of the country. We do not solicit applications locally and refrain from active

recruitment in the local areas. However, we are obliged to accept applications and to give equal consideration to local applicants.

"When the Manager and Chief, Nursing Service, of a new Veterans Administration hospital are assigned, it is our intent that they will contact and coordinate employment of local nurses with the Directors of Nursing at the various local hospitals. In the event a number of nurses have made application, and are currently employed in a particular local hospital, and are determined eligible for appointment in our service, every effort will be made by our organization to space the dates of acceptance for employment in such a manner as to place a minimum amount of inconvenience on the local hospital which is losing nurses.

"The Chief, Nursing Service and the Assistant Chiefs both in Nursing Service and

Nursing Education have been selected for the new Baltimore hospital. These nurses are all currently employed in our service. It is anticipated that, insofar as possible, other administrative and supervisory nurse personnel will also be nurses currently employed in Veterans Administration, who have requested transfer.

"Our new hospitals are activated slowly, usually with a nucleus of nurses transferred in from other Veterans Administration hospitals. It will doubtless be several months and on a gradual basis before an appreciable number of new nurse applicants are employed."

Miss Margaret Greene is scheduled to report for duty as Chief, Nursing Service of the new Veterans Administration Hospital in Baltimore the latter part of August. Miss Greene, whose home is in Baltimore, is being transferred from a similar position in Portland, Oregon.

PHARMACY SECTION

Maryland Board of Pharmacy

L. M. KANTNER, PHAR.D., *Secretary*

THE AMERICAN PHARMACEUTICAL ASSOCIATION CELEBRATES 100th ANNIVERSARY

In the City of Philadelphia, where the American Pharmaceutical Association was organized in 1852—just five years after the founding of the American Medical Association, pharmacists and representatives of allied professions from twenty-two foreign countries met during the week of August 18th, celebrating a century of progress in professional pharmacy, education, and cooperation with the healing professions.

Claim is made that 15,000,000 people visit the pharmacies of the United States every day. Many of the people come to make purchases totally unrelated to medical care. Thousands of others go to

the pharmacy to have prescriptions filled and to procure the various needs in medical care.

In 1852, the pharmacist was required to be a manufacturer of the preparations he dispensed on prescriptions or supplied to the physician who oft times carried his medical supplies in saddle bags.

The pharmacist made his fluid extracts, tinctures, infusions, decoctions, pills, ointments, and plasters. There were no drug laws that necessitated a medicinal to meet definite standards.

Assays for his products were unknown, and despite the meticulous care exercised in the manufacturing of medicinals, at the best, it was a more or less hit or miss procedure.

Today, medicinals must meet definite standards for purity and strength, and the industry is policed by Federal and State authorities.

In 1852, narcotics could be sold as freely as Bicarbonate of Soda. Soothing syrups and cough mixtures were loaded with opium or morphine, and catarrh powders were fortified with Cocaine. A century and less ago, leeches were an item that could be obtained in a large number of the drug stores—and, it is claimed the sale was most heavy on Sunday morning—"the morning after the night before."

Today, there is but one drug store known to the writer where leeches are procurable.

Pharmacists were trained by the preceptor system and often the parent paid the pharmacist (many of whom were educated in Europe) to permit the son to enter the establishment as an apprentice.

In those days, women pharmacists were unknown. Today, 5% of the pharmacists are women. Many of these are found in hospital pharmacies.

Today, about 5% of the pharmacies are strictly professional, excluding all activity to the filling of prescriptions and supplying medical care supplies.

Although the Philadelphia College of Pharmacy was established in 1821, there were no educational requirements to practice pharmacy. Since 1920, the pharmaceutical educational standards have been raised from a two year college course to a full academic course of four years, placing pharmacy on the same footing with all other branches of science taught at institutions of higher learning. Some of the present day Colleges of Pharmacy have extended the course to six years, leading to the doctor's degree.

Today, there are hundreds of millions of dollars invested in pharmaceutical manufacturing plants, many of which developed from a former retail drug store: Sharp and Dohme, Wyeth, Eli Lilly, and others. In these structures of steel, brick and concrete, roughly 65,000-75,000 pharmacists are employed as manufacturers of special preparations, chemists, assayists, bacteriologists, biochemists, detail representatives, as well as executives.

These pharmaceutical manufacturers are supplying the medical profession with drugs that have a dramatic curing effect. Claim is made that 80% of today's effective medication was unheard of 20 years ago. Poke, root, sumbul, valerian, taraxicum, uva ursi, buchu, to mention a few, are gone with the times.

Specialized medicine is the order of the day. These drugs are released for consumption only after the most painstaking care conceivable to man to assure as perfect a product as is humanly possible to produce. From the standardization of raw materials, all operations are under perfect aseptic and sanitary surroundings. Laboratory tests, chemical or biological, then clinical tests—all this to give assurance of perfect medication—for specific purposes.

Dr. Howard A. Rusk, writing in the New York Times says:

"The 'drug store' is a peculiarly American institution. It combines the elements of the English 'chemist shop' and the European 'apotheker' and 'drogagerie,' of providing a convenient source of supply for health requisites, with a broad gamut of services and articles that have nothing to do with medical care. As one leading pharmacist said: 'What the American public has actually done is to subsidize its pharmacies for emergency needs by patronizing them for merchandise quite unrelated to the business in drugs or the practice of Pharmacy. They want pharmacies available at convenient spots when, as and if needed for professional—services.'

"Backing up the contributions of the corner drug-store pharmacist are the tremendous programs of drug manufacturing, drug standardization and control, research and development of the country's pharmaceutical industry. They bear the responsibility of bringing the results of test tube discoveries to the bed-side at a cost within the reach of the average citizen."

"Standing by as government 'watchdogs' to insure quality and purity are the Biologics Control Unit of the National Institutes of Health and the Federal Food and Drug Administration. However, as Surgeon General Leonard A. Scheele has pointed out, 'Although authority to enforce biologic standards is vested in the Public Health Service, there has been little occasion to use authority. Instead, the industry and the Service have recognized a mutual interest in and responsibility for protecting the public against impure or inferior biologic products.'"

"On this, its one hundredth anniversary, the American Pharmaceutical Association merits the congratulations of the public and the professions that it serves."